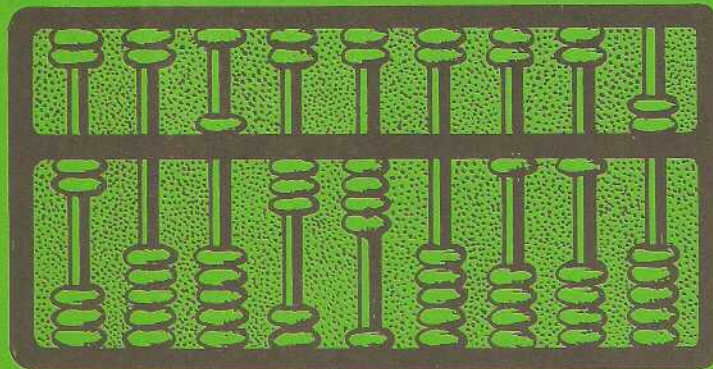


МЕНТАЛЬНАЯ
АРИФМЕТИКА



Ментальная арифметика

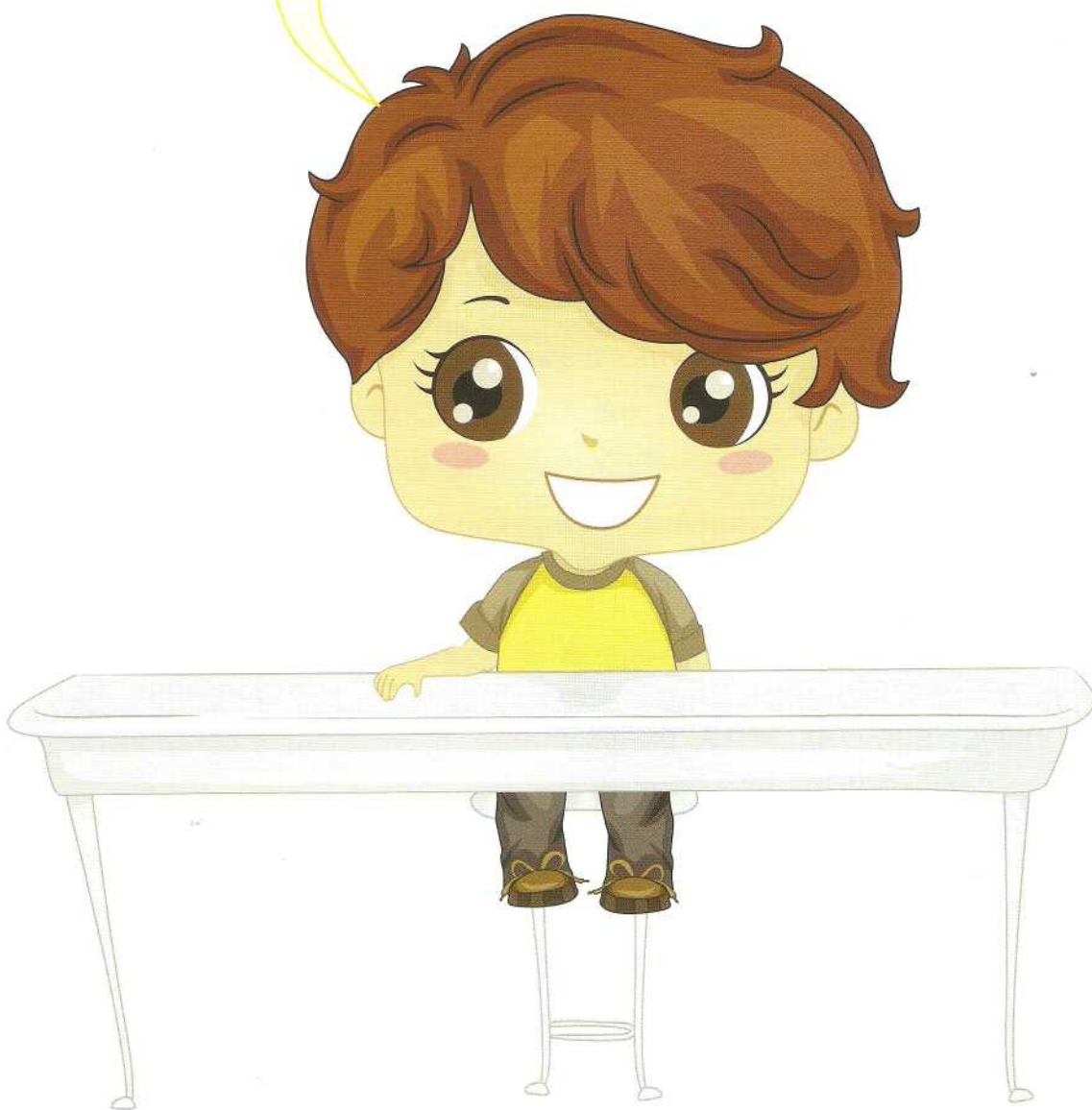
Для детей
4–6 лет



учебник



*Здравствуйте, ребята !
Меня зовут Андрей. Мы с Вами вместе
будем изучать ментальную арифметику.*



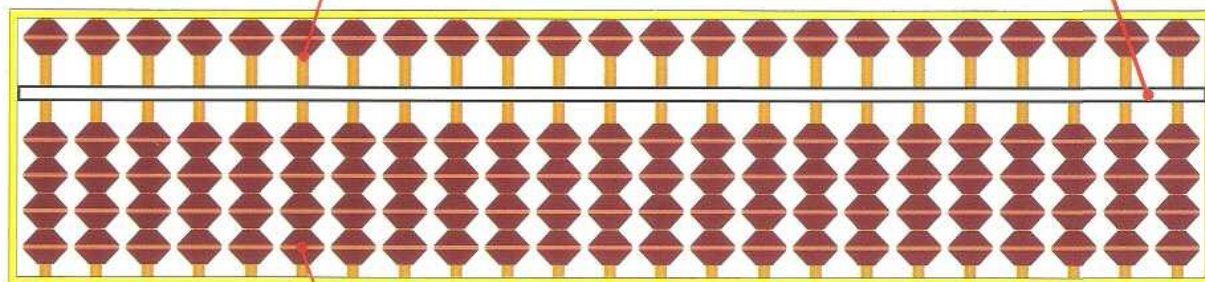


Давайте познакомимся с Абакусом



верхний ряд бусинок
(значение: 5)

расчетная
линейка



нижний ряд бусинок
(значение: 1)

Теперь научимся считать на Абакусе





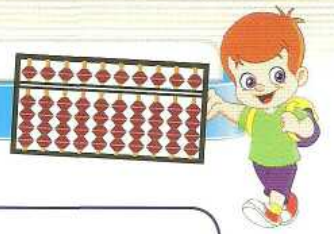
Изучим цифры на Абакусе

Row 1: Digit 1. Includes an illustration of an elephant, a solid number 1 with stroke order arrows (1), a dashed number 1 for tracing, and an abacus with 1 purple bead on the top row.

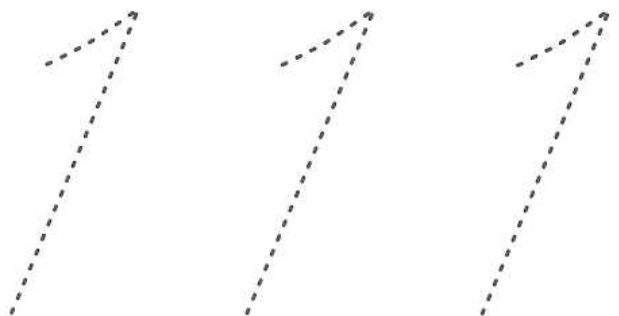

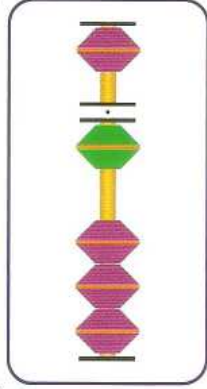
Row 2: Digit 2. Includes an illustration of two kangaroos, a solid number 2 with stroke order arrows (1), a dashed number 2 for tracing, and an abacus with 2 green beads on the second row from the top.

Row 3: Digit 3. Includes an illustration of three striped fish, a solid number 3 with stroke order arrows (1), a dashed number 3 for tracing, and an abacus with 3 green beads on the third row from the top.

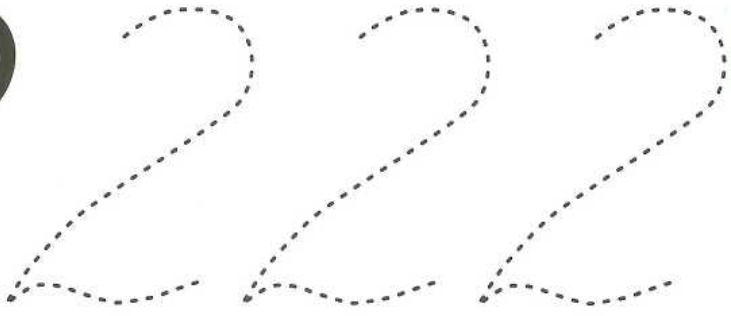

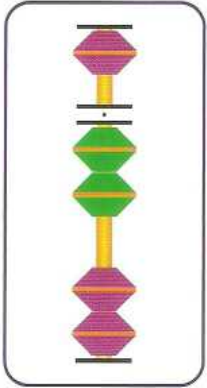
Row 4: Digit 4. Includes an illustration of four yellow ducks, a solid number 4 with stroke order arrows (1, 2), a dashed number 4 for tracing, and an abacus with 4 green beads on the fourth row from the top.




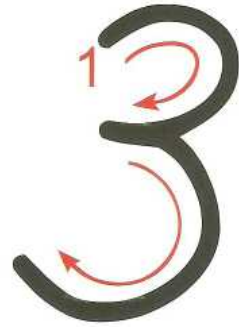
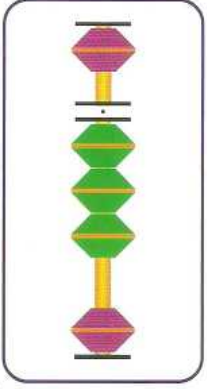
1



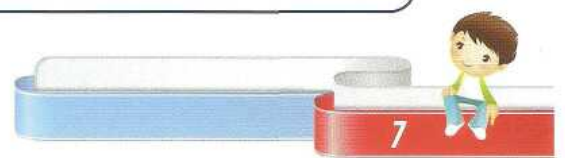
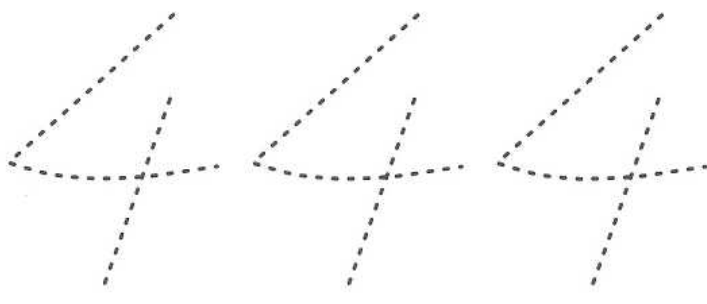
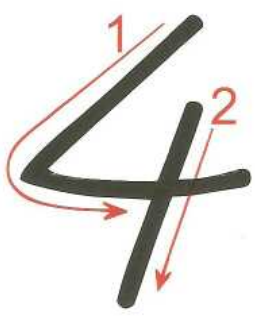
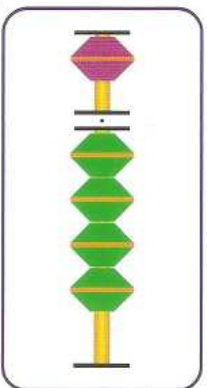
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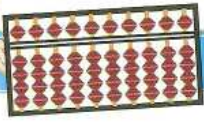


3

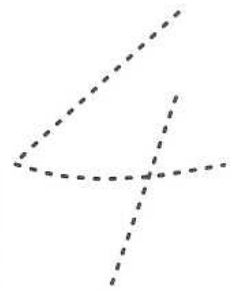
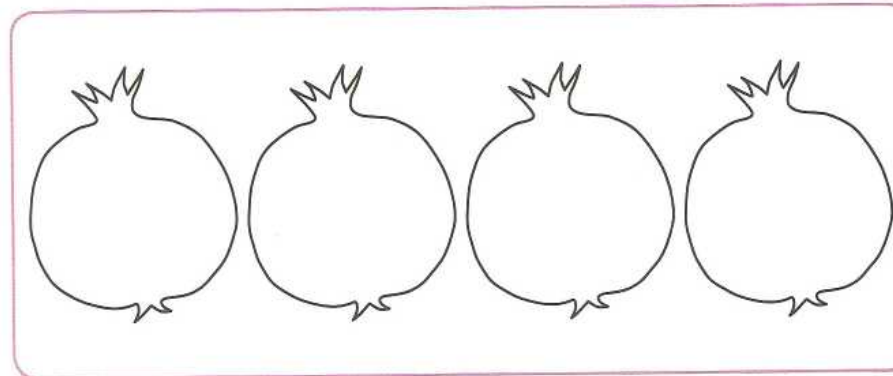
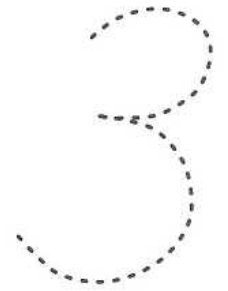
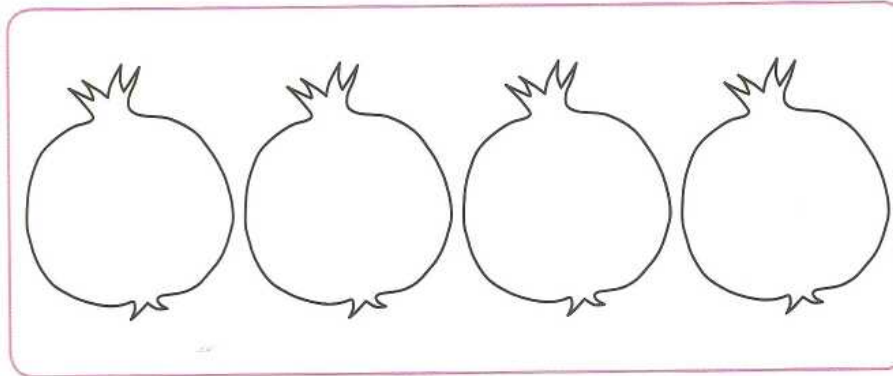
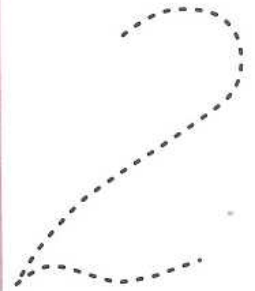
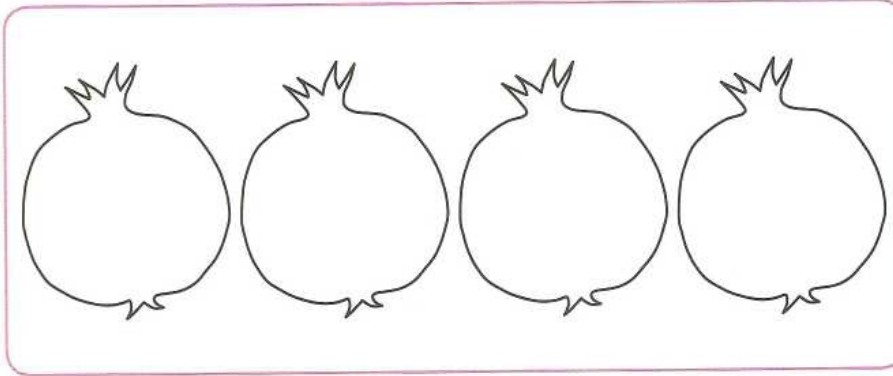
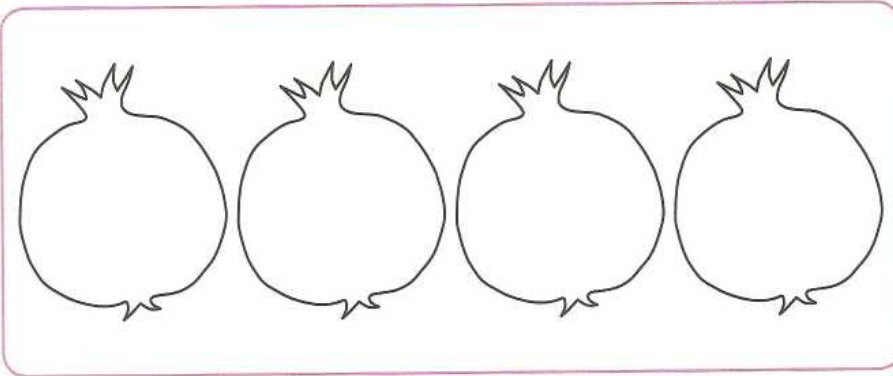


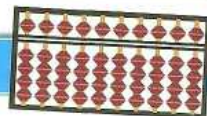
4



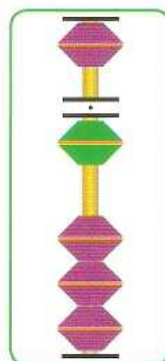
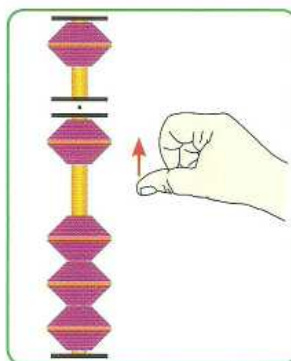
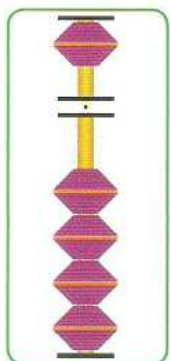


Разукрасим столько гранатов, сколько
указано на Абакусе

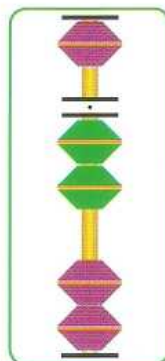
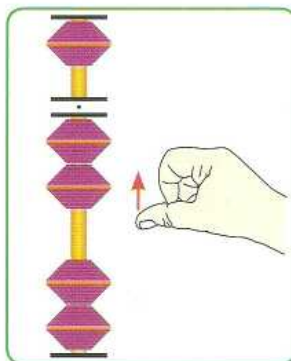
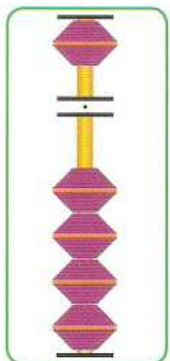
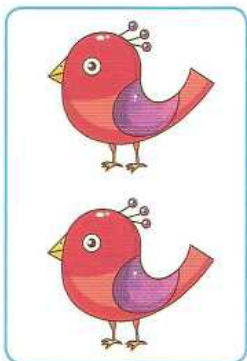




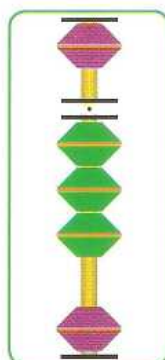
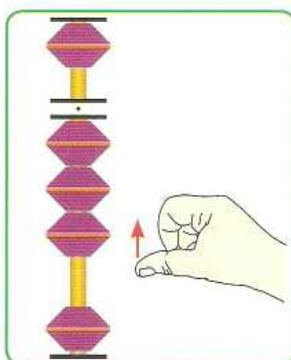
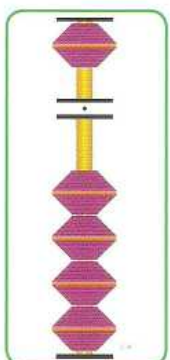
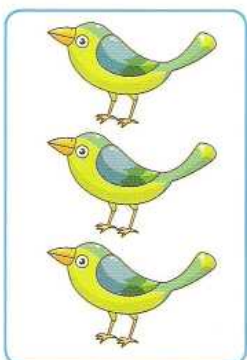
Запишем цифру, указанную на Абакусе



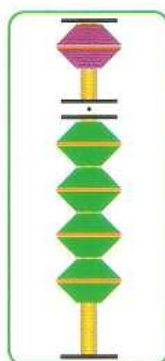
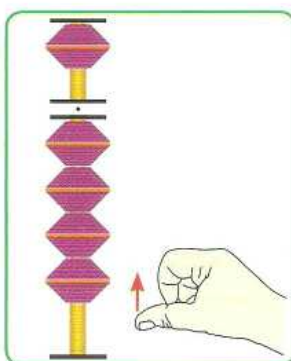
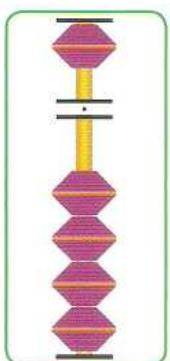
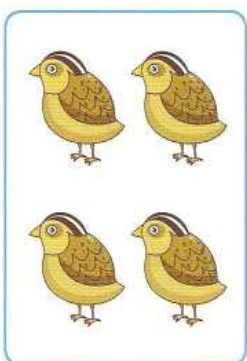
.....



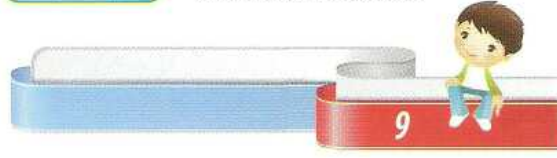
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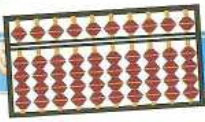


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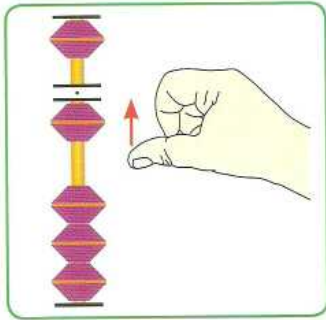


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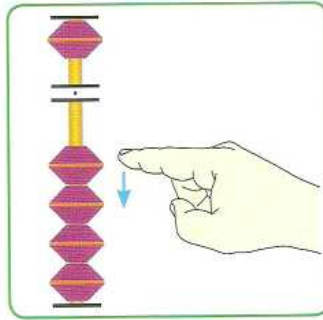




Для нижней части Абакуса
при добавлении используем большой палец,
при вычитании - указательный палец

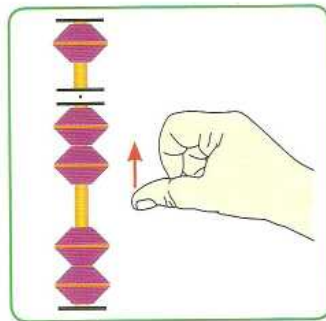


+ 1

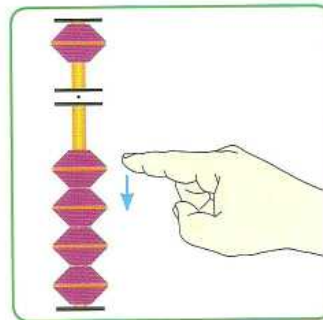


- 1

1

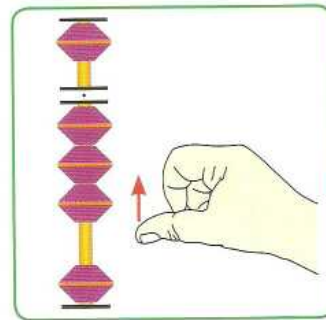


+ 2

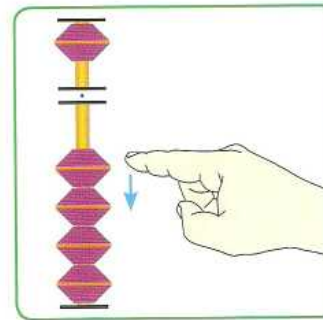


- 2

2

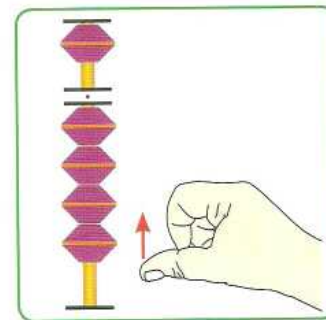


+ 3

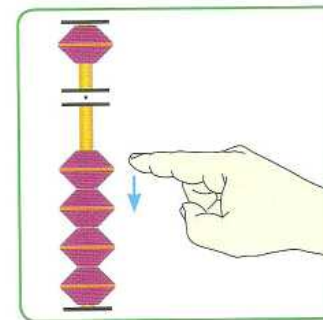


- 3

3



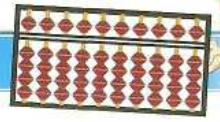
+ 4



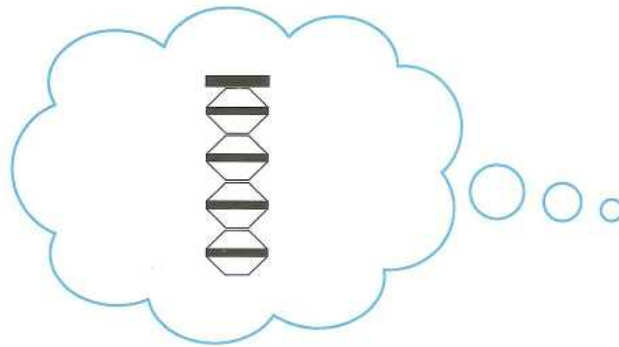
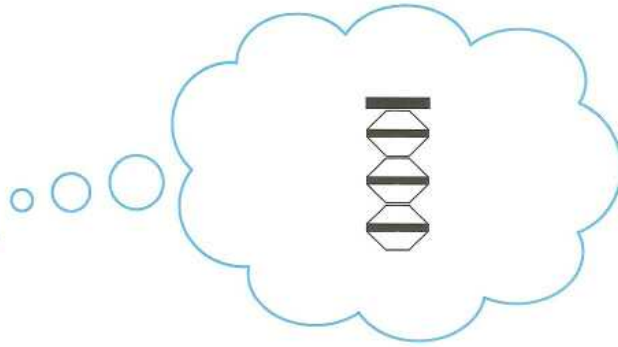
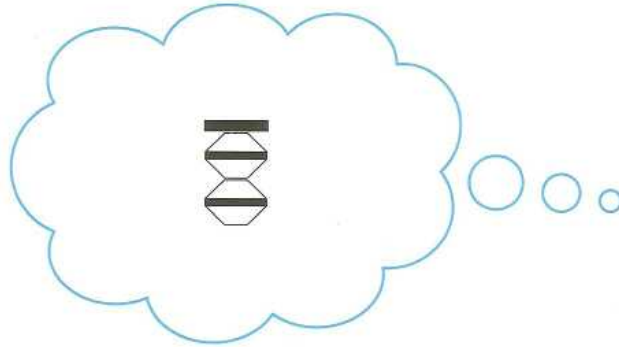
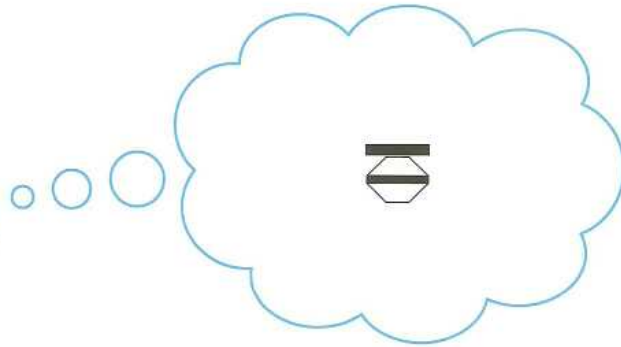
- 4

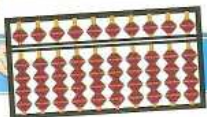
4





Представим в уме Абакус и разукрасим





Продолжим изучение цифр на Абакусе

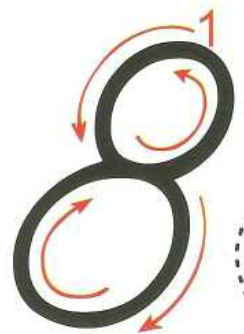
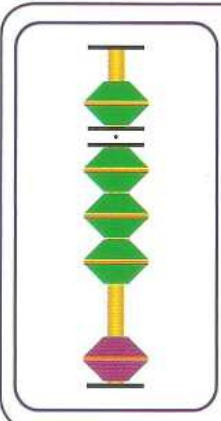
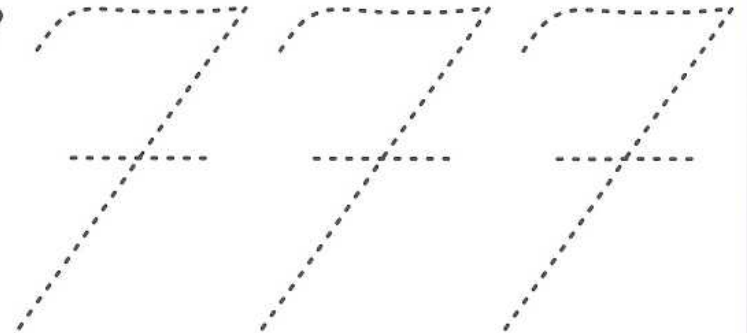
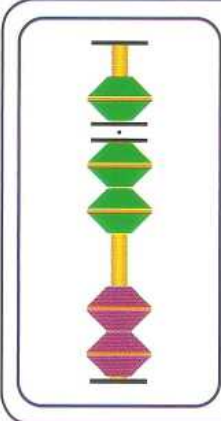
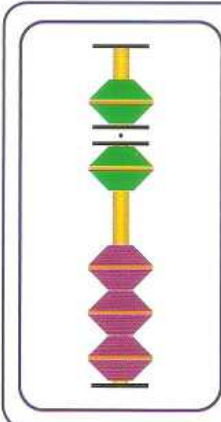
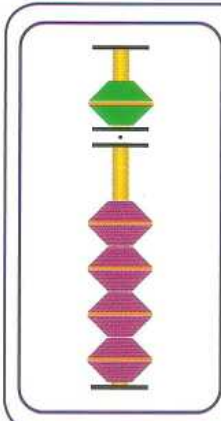
Row 1: Five frogs, a solid number 5 with stroke order arrows (1: vertical down, 2: top horizontal), a dashed number 5 for tracing, and an abacus with 5 beads (2 green, 3 purple).

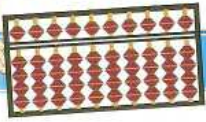
Row 2: Six ladybugs, a solid number 6 with stroke order arrows (1: counter-clockwise circle), a dashed number 6 for tracing, and an abacus with 6 beads (3 green, 3 purple).

Row 3: Five dogs, a solid number 7 with stroke order arrows (1: top horizontal, 2: diagonal down), a dashed number 7 for tracing, and an abacus with 7 beads (4 green, 3 purple).

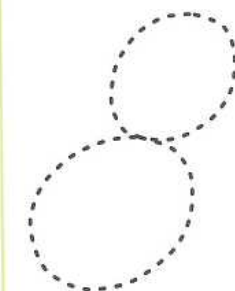
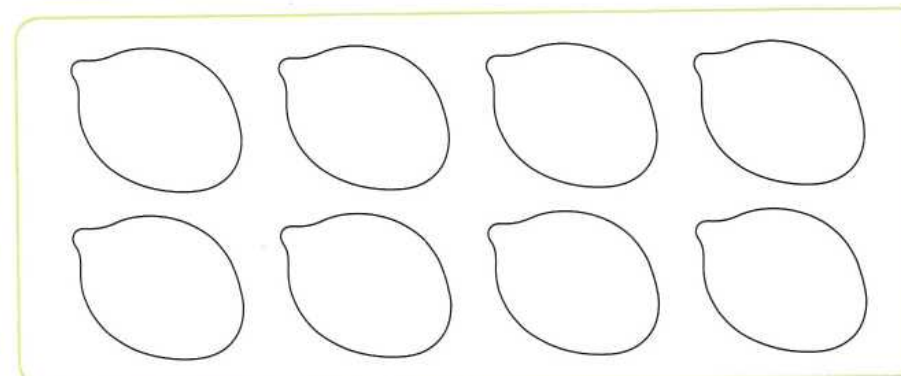
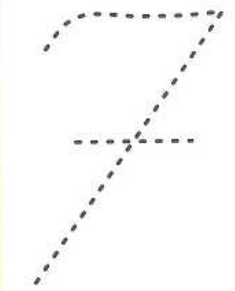
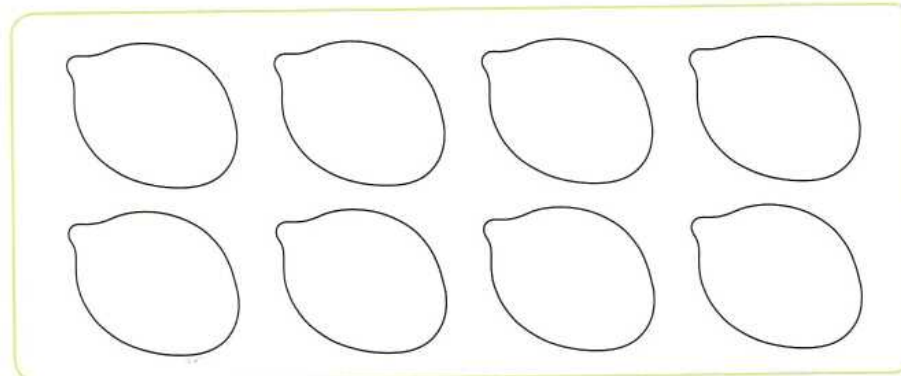
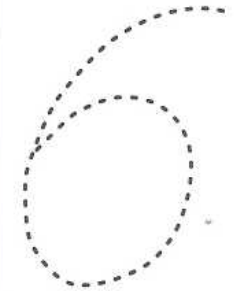
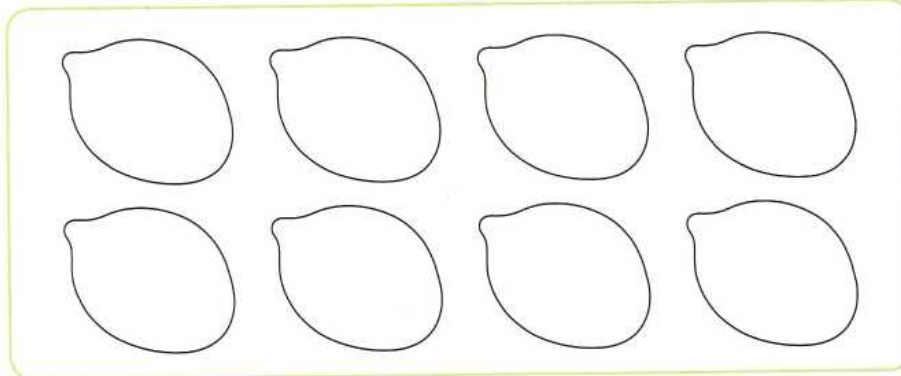
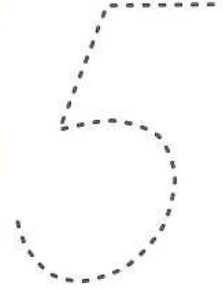
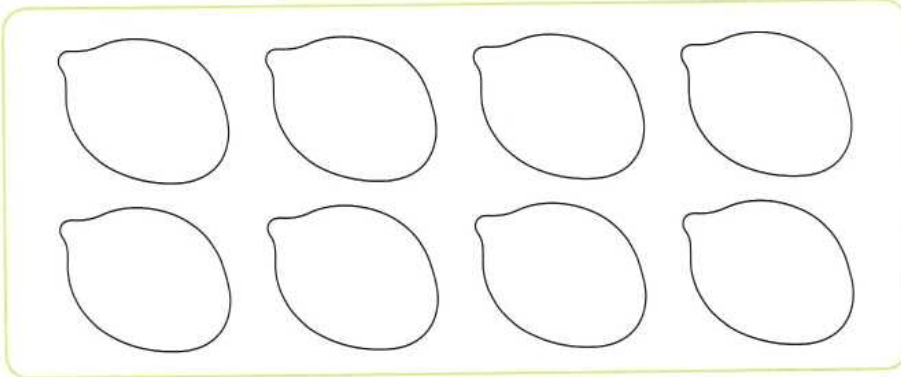
Row 4: Eight chickens, a solid number 8 with stroke order arrows (1: top loop, 2: bottom loop), a dashed number 8 for tracing, and an abacus with 8 beads (5 green, 3 purple).

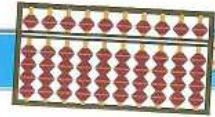




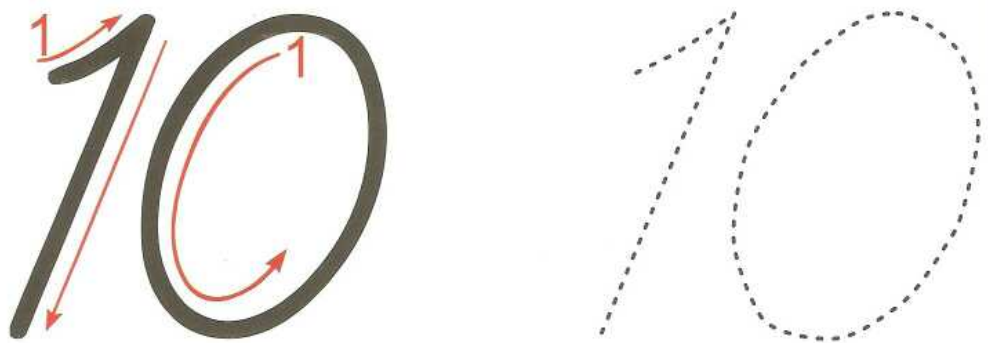
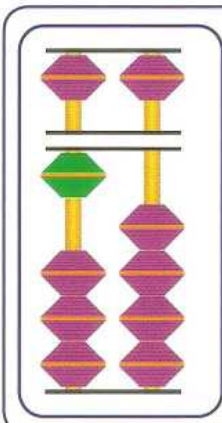
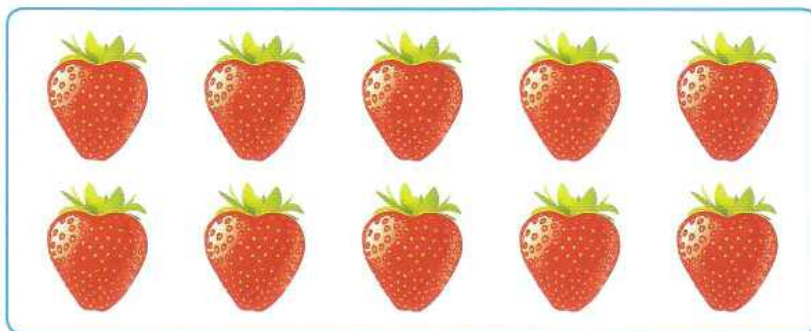
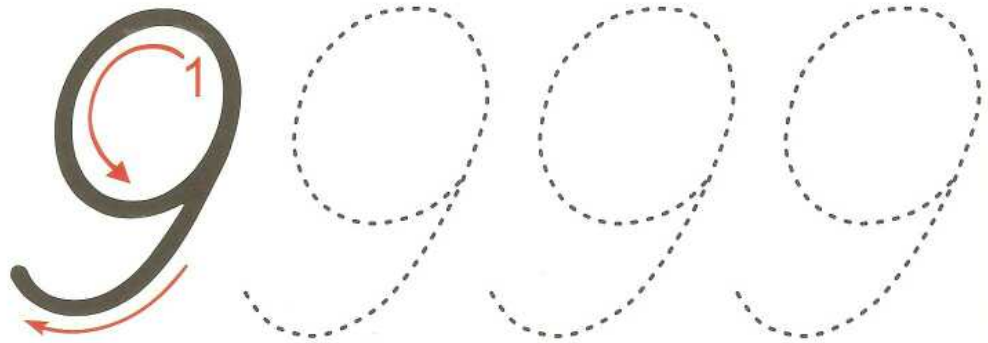
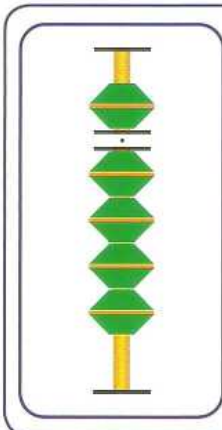
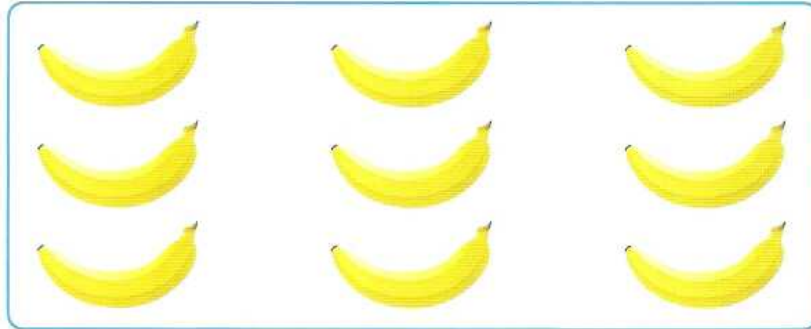


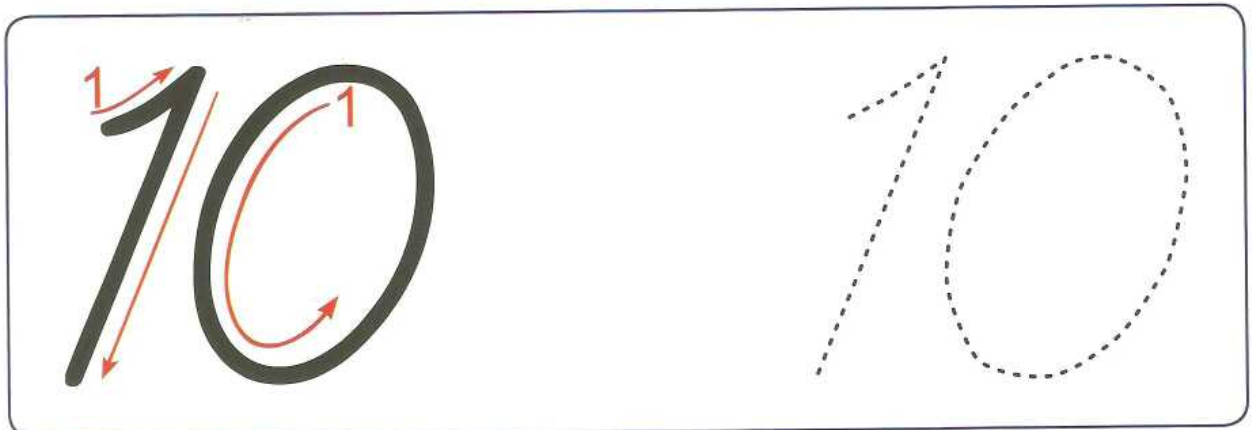
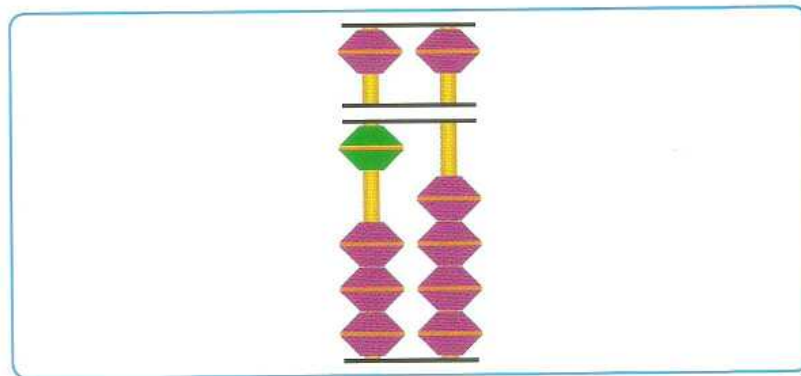
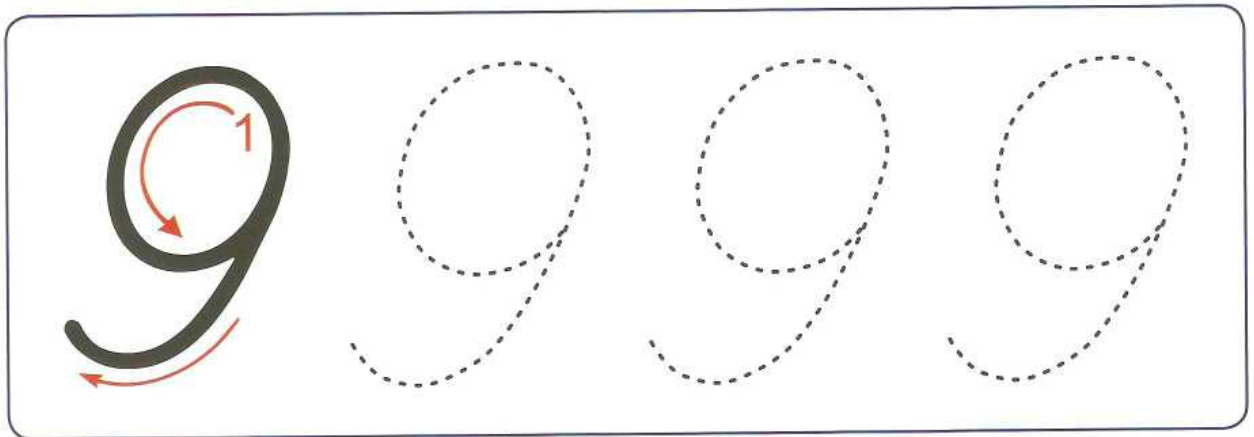
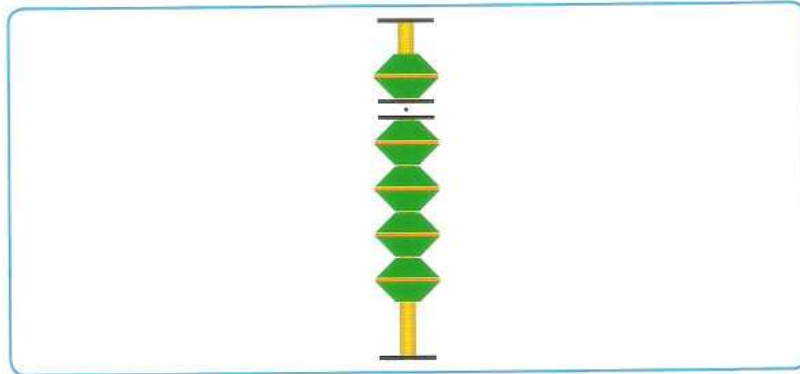
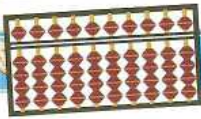
Разукрасим столько лимонов, сколько
указано на Абакусе

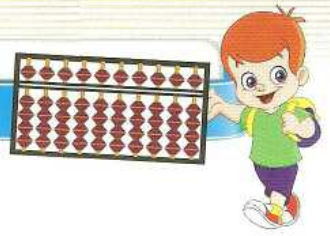




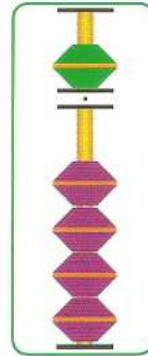
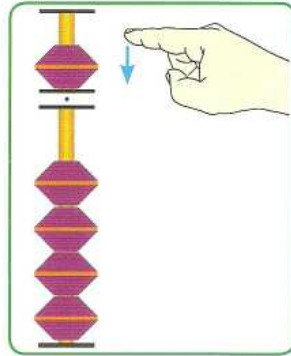
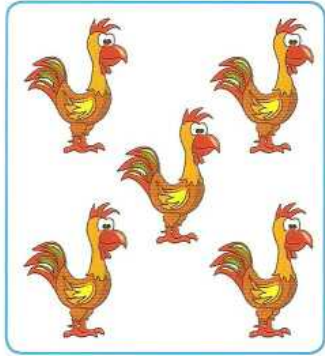
Изучим числа 9 и 10 на Абакусе



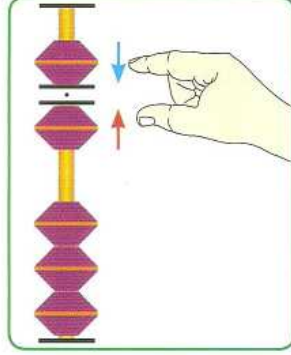
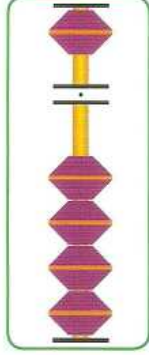
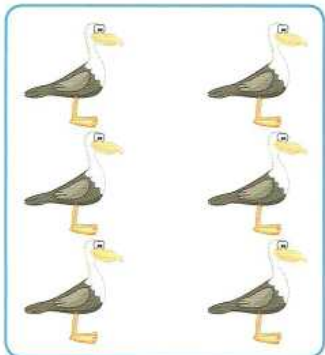




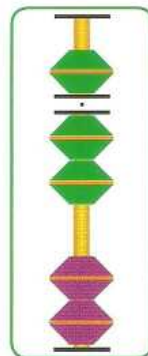
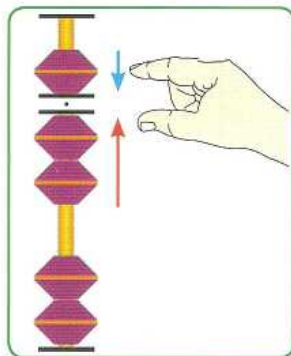
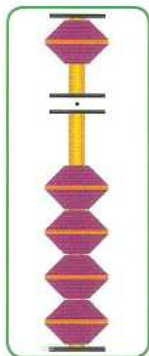
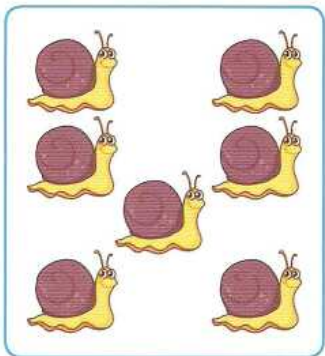
Запишем цифры, указанные на Абакусе



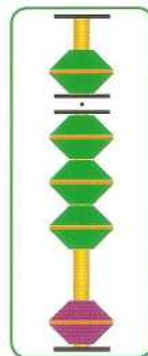
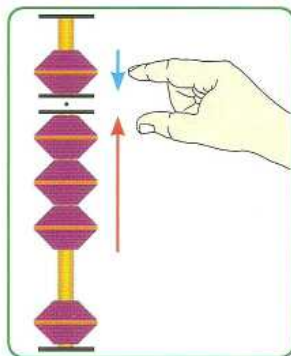
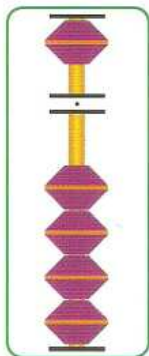
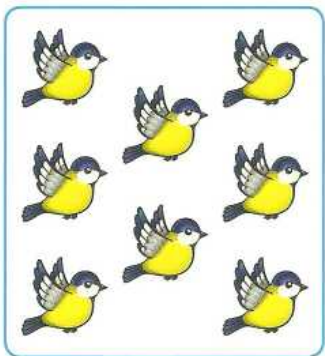
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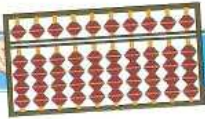


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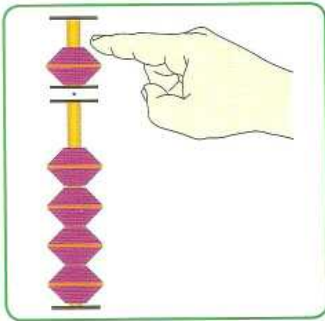


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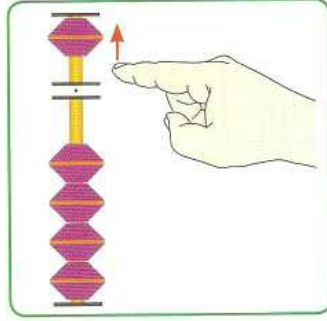




Для верхней части Абакуса при добавлении и вычитании используем только указательный палец

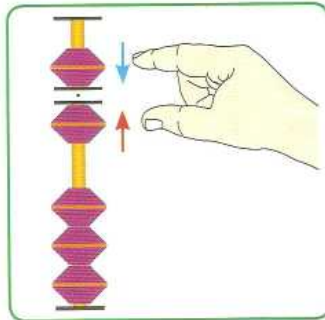


+ 5

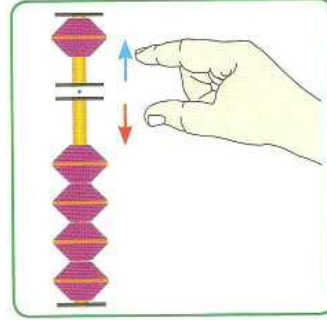


- 5

5

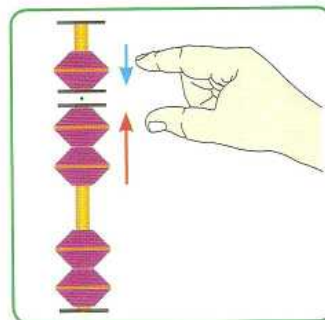


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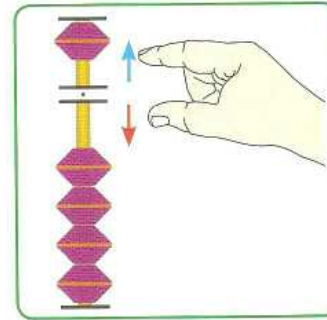


- 6

6

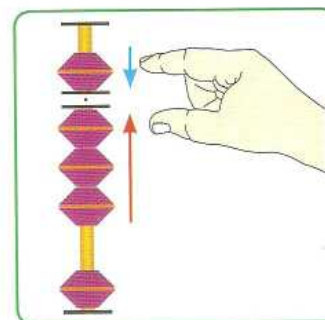


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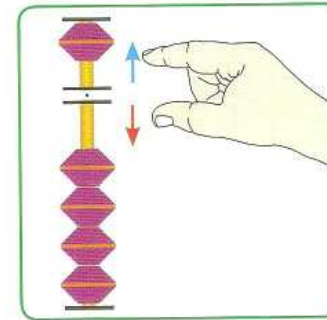


- 7

7



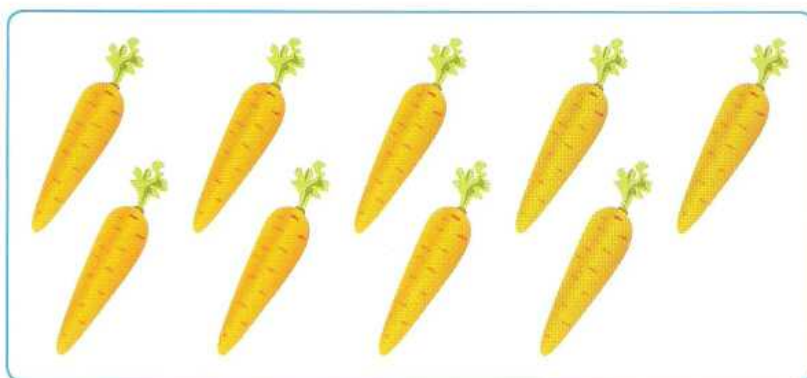
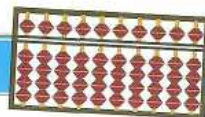
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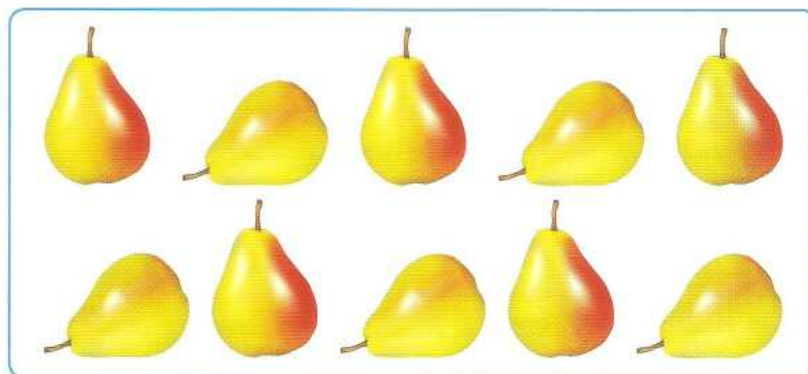
- 8

8



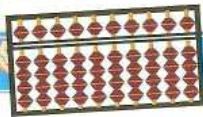


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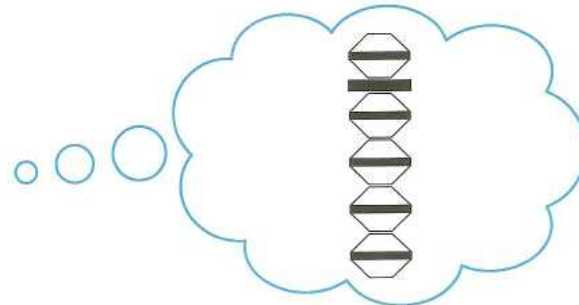
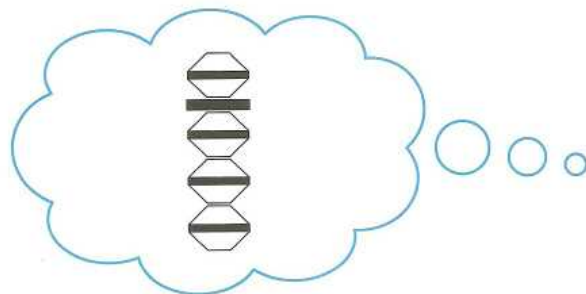
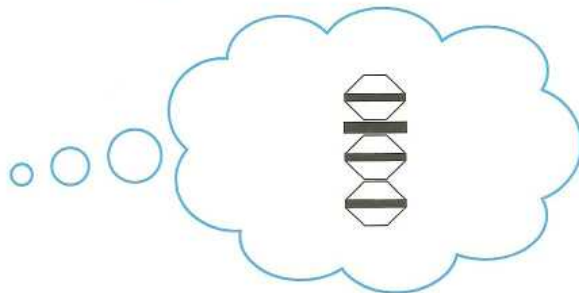
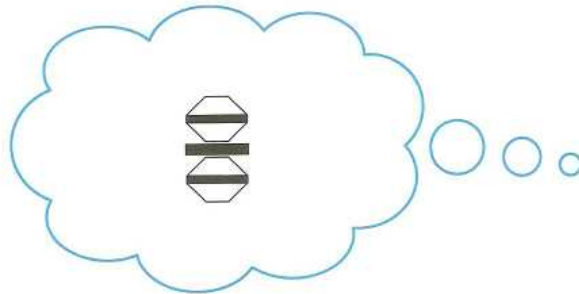
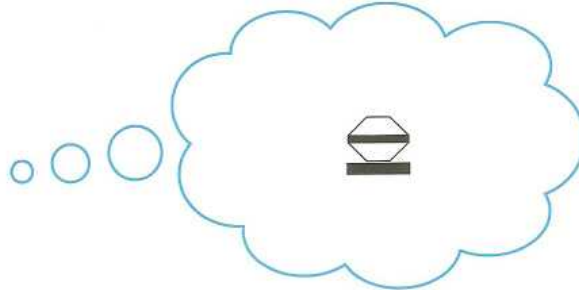


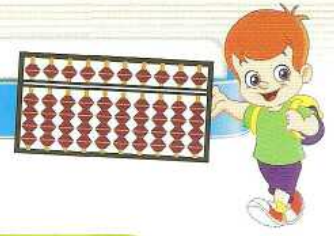
10





Представим в уме Абакус и разукрасим





Запишем цифры, показанные на Абакусе

Diagram 1: An abacus with 5 rows of beads. The top row has 2 purple beads. The second row has 1 green bead moved up. The third, fourth, and fifth rows each have 2 purple beads. A hand is shown moving the green bead up. Below the diagram is a white rectangular box for writing the number.

Diagram 2: An abacus with 5 rows of beads. The top row has 2 purple beads. The third row has 1 green bead moved up. The second, fourth, and fifth rows each have 2 purple beads. A hand is shown moving the green bead up. Below the diagram is a white rectangular box for writing the number.

Diagram 3: An abacus with 5 rows of beads. The top row has 2 purple beads. The fourth row has 1 green bead moved up. The second, third, and fifth rows each have 2 purple beads. A hand is shown moving the green bead up. Below the diagram is a white rectangular box for writing the number.

Diagram 4: An abacus with 5 rows of beads. The top row has 2 purple beads. The fifth row has 1 green bead moved up. The second, third, and fourth rows each have 2 purple beads. A hand is shown moving the green bead up. Below the diagram is a white rectangular box for writing the number.

Diagram 5: An abacus with 5 rows of beads. The top row has 2 purple beads. The second row has 1 green bead moved down. The third, fourth, and fifth rows each have 2 purple beads. A hand is shown moving the green bead down. Below the diagram is a white rectangular box for writing the number.

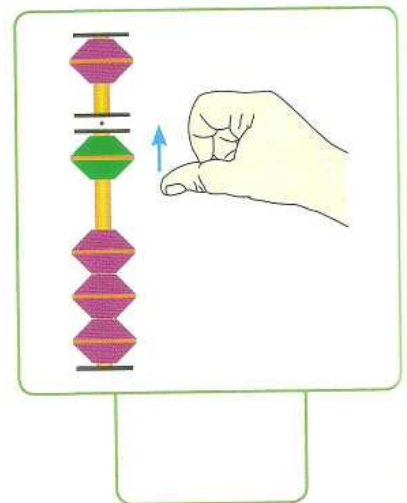
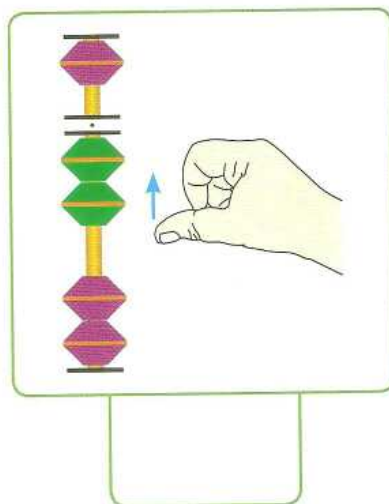
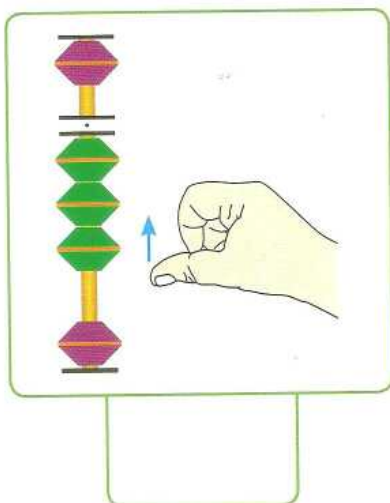
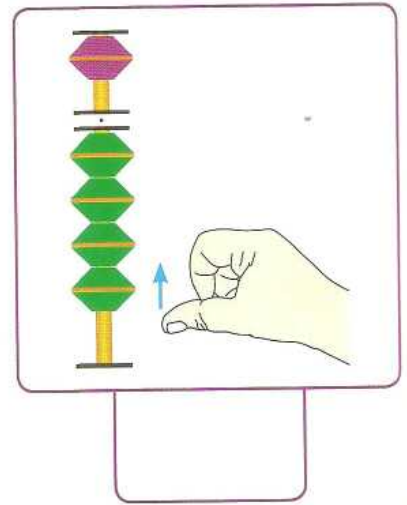
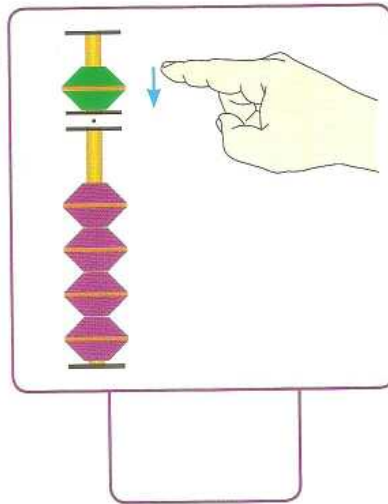
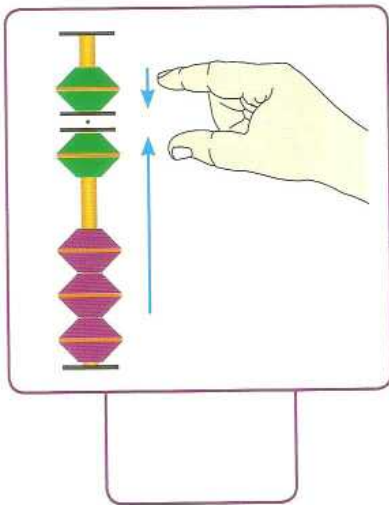
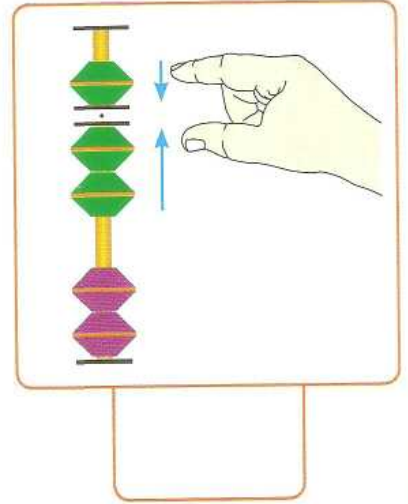
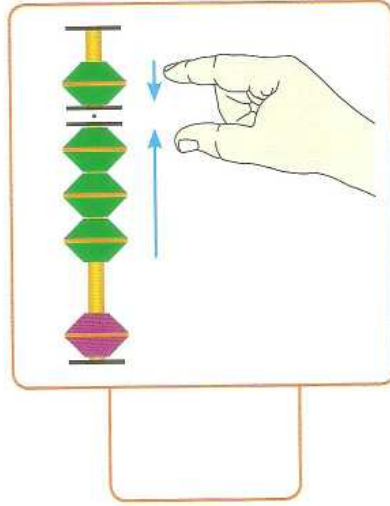
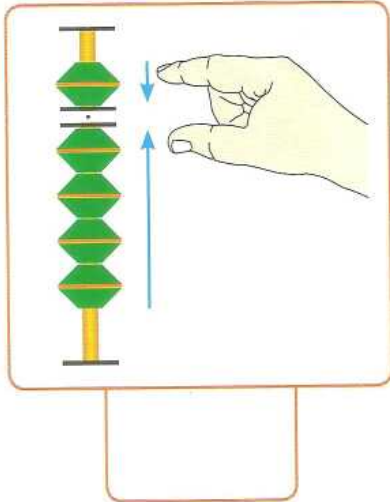
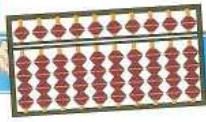
Diagram 6: An abacus with 5 rows of beads. The top row has 2 purple beads. The third row has 1 green bead moved down. The second, fourth, and fifth rows each have 2 purple beads. A hand is shown moving the green bead down. Below the diagram is a white rectangular box for writing the number.

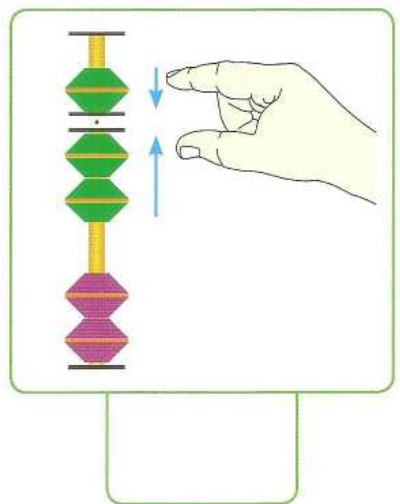
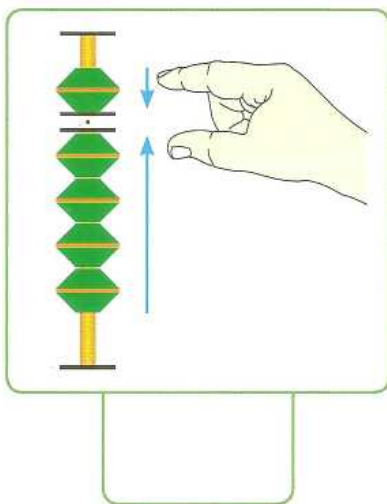
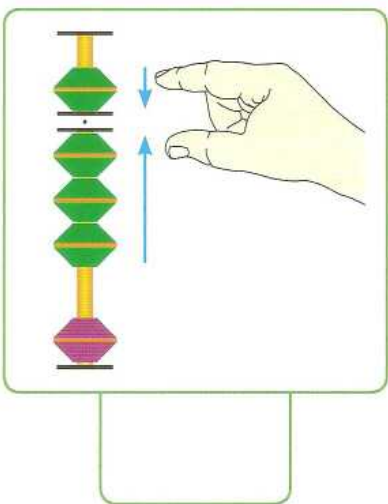
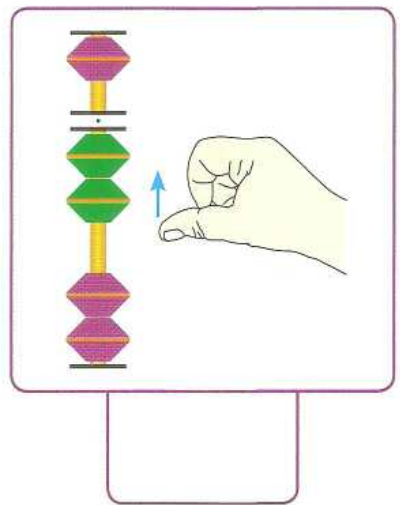
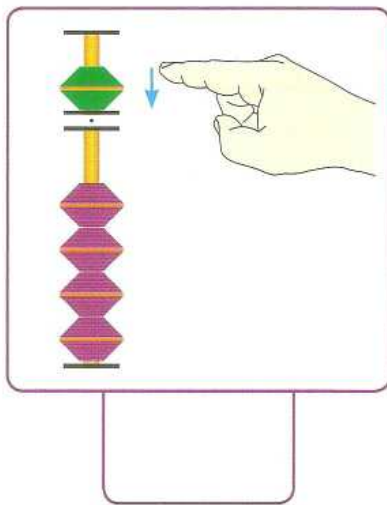
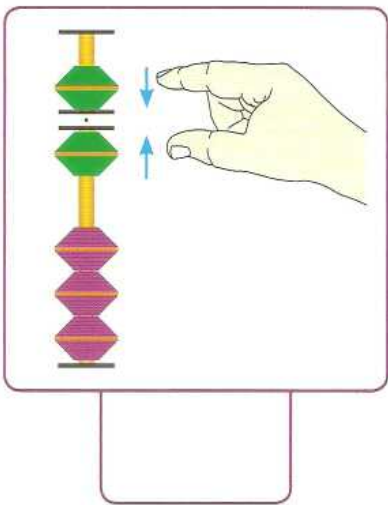
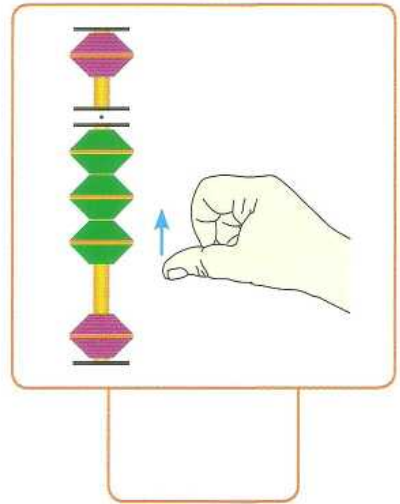
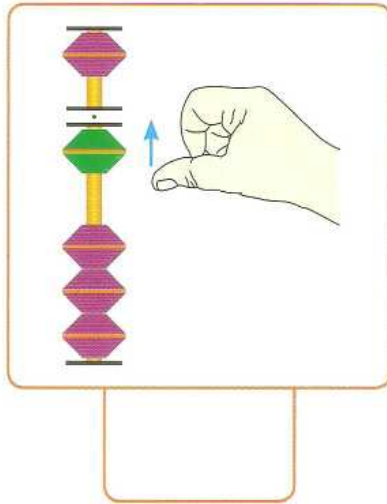
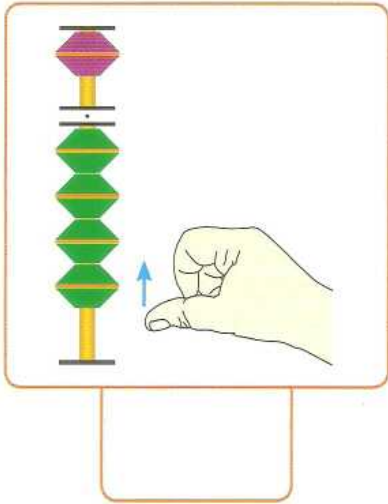
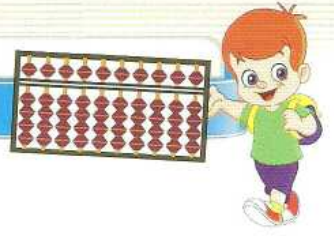
Diagram 7: An abacus with 5 rows of beads. The top row has 2 purple beads. The fourth row has 1 green bead moved down. The second, third, and fifth rows each have 2 purple beads. A hand is shown moving the green bead down. Below the diagram is a white rectangular box for writing the number.

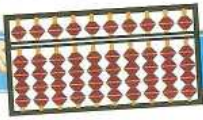
Diagram 8: An abacus with 5 rows of beads. The top row has 2 purple beads. The fifth row has 1 green bead moved down. The second, third, and fourth rows each have 2 purple beads. A hand is shown moving the green bead down. Below the diagram is a white rectangular box for writing the number.

Diagram 9: An abacus with 5 rows of beads. The top row has 2 purple beads. The second row has 1 green bead moved down. The third, fourth, and fifth rows each have 2 purple beads. A hand is shown moving the green bead down. Below the diagram is a white rectangular box for writing the number.

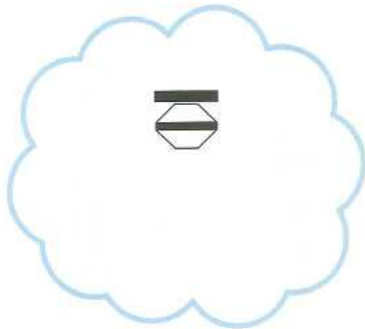




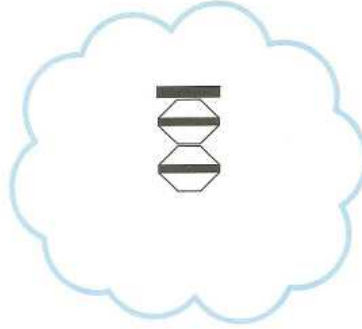




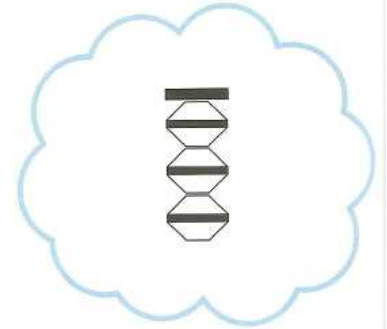
Теперь, давайте разукрасим бусинки



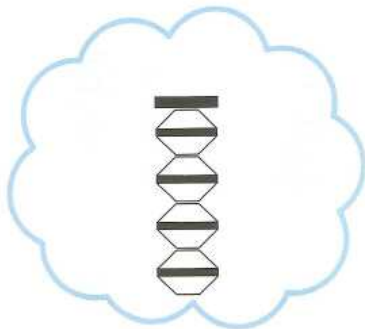
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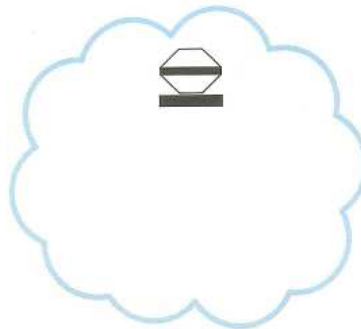
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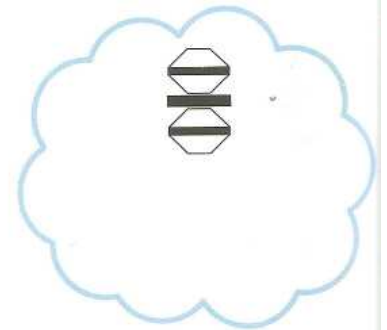
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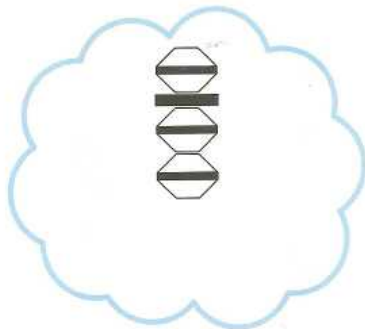
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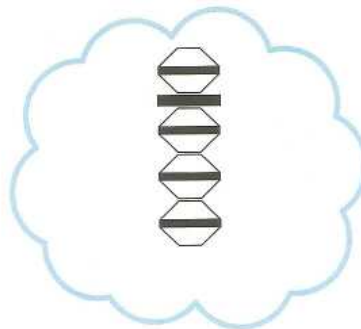
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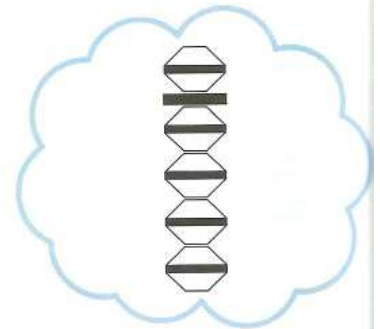
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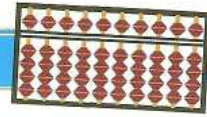


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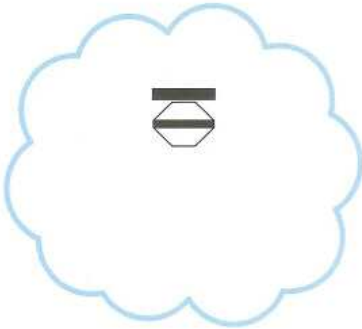


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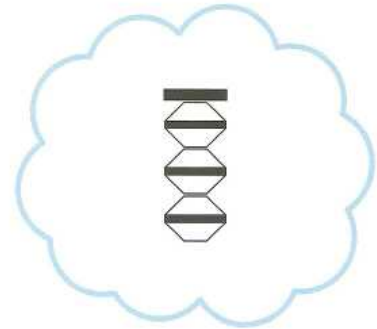
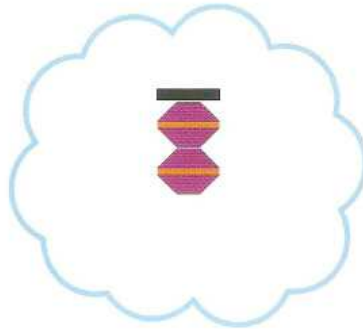




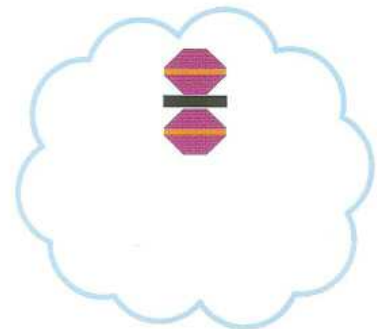
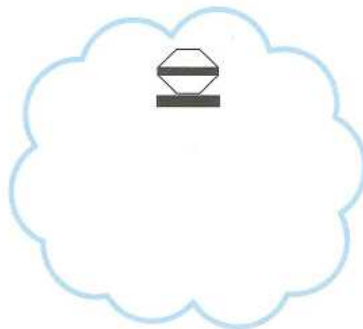
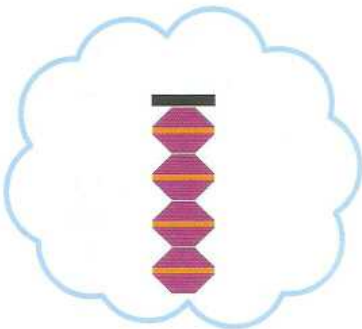
А сейчас заполним пропуски



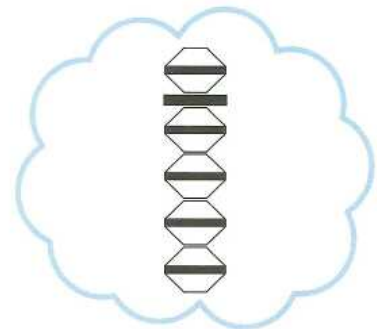
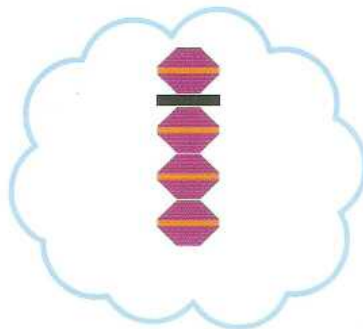
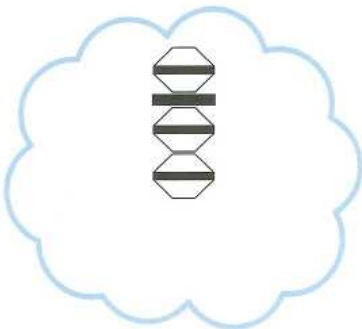
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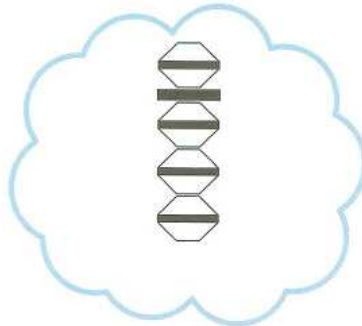
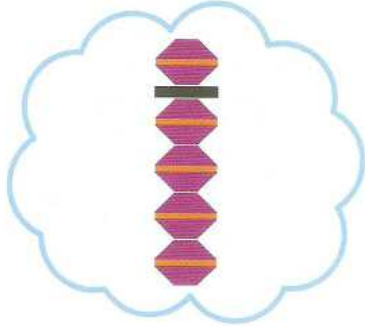
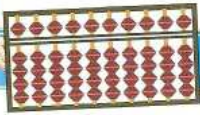
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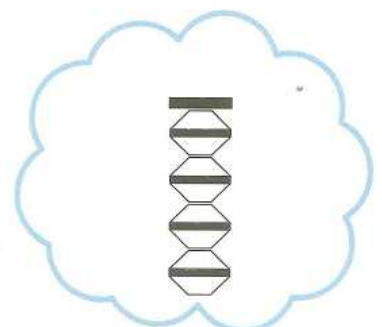
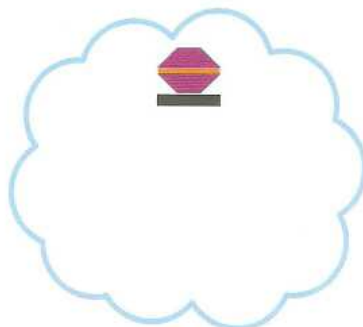
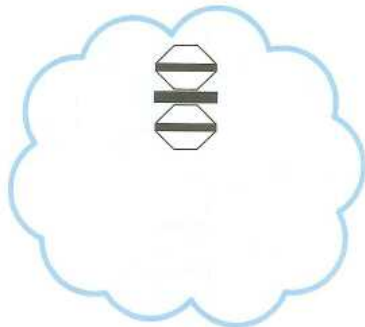
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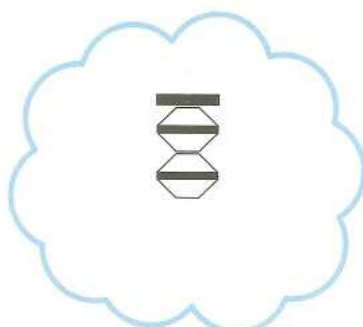
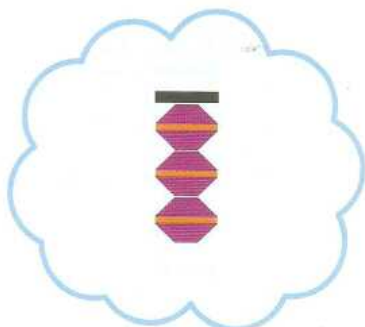


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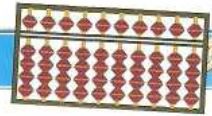
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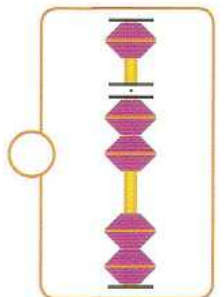
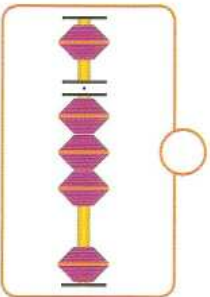
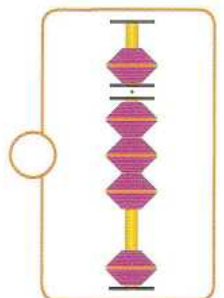
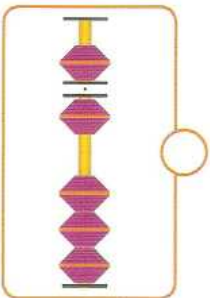
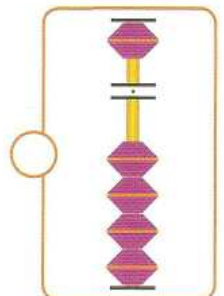
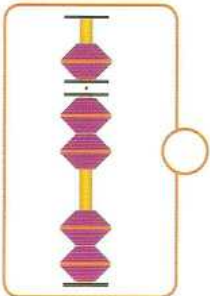
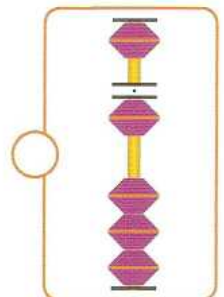
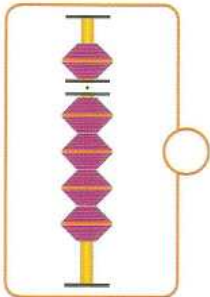
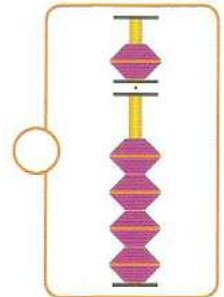
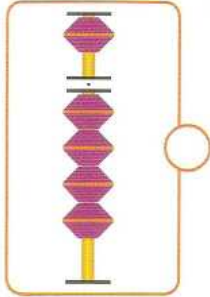


2



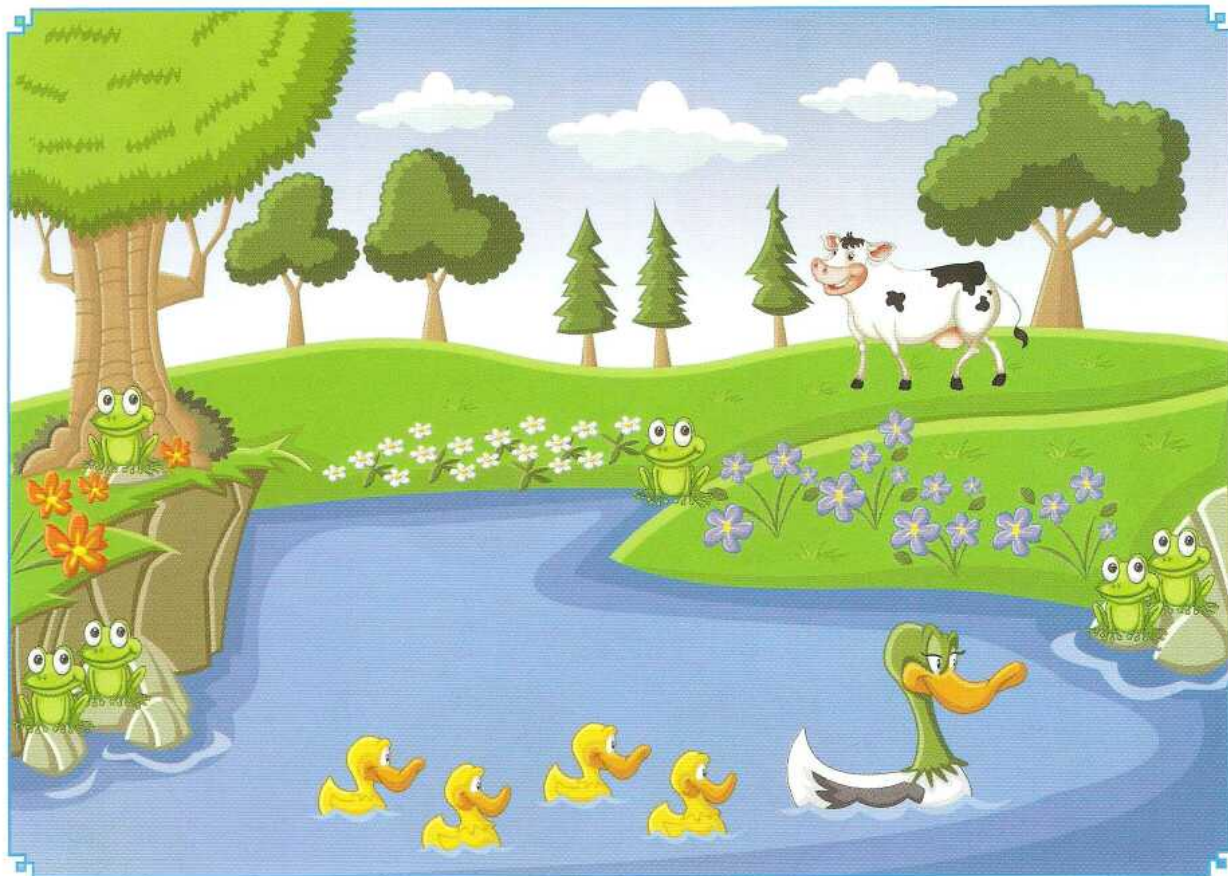


Попробуем подобрать нужный фрукт





Давайте ответим на вопросы по рисунку



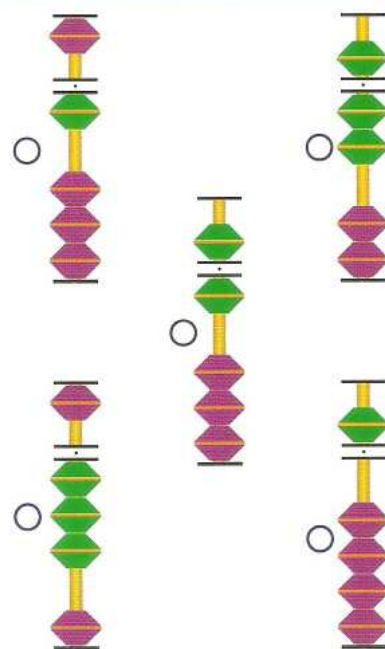
★ Сколько облаков на рисунке? ○

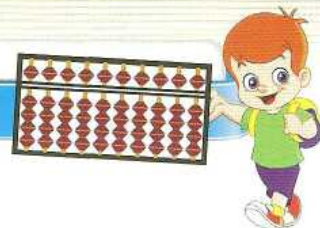
★ Сколько лягушек? ○

★ Сколько деревьев? ○

★ Сколько уток? ○

★ Сколько коров? ○





Выберем верные ответы на вопросы



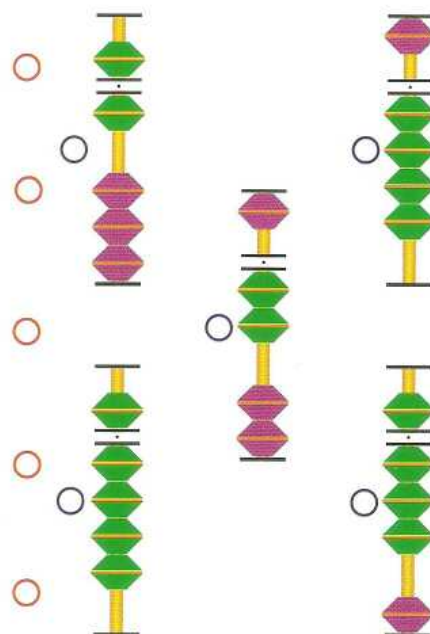
★ Сколько дельфинов на рисунке?

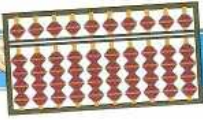
★ Сколько зонтиков?

★ Сколько морских звездочек?

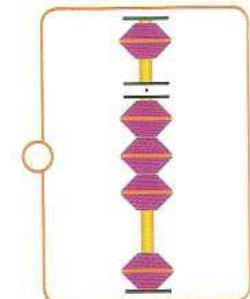
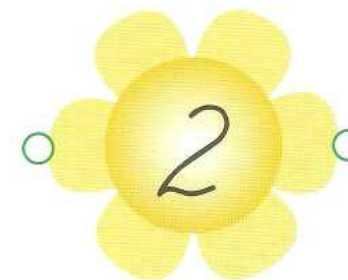
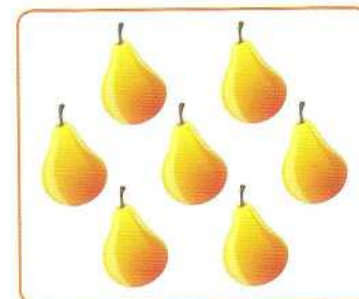
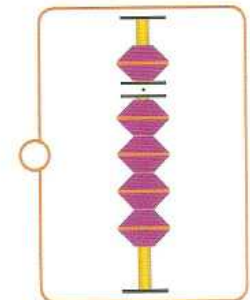
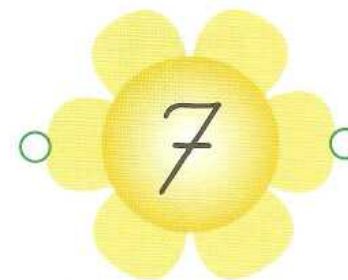
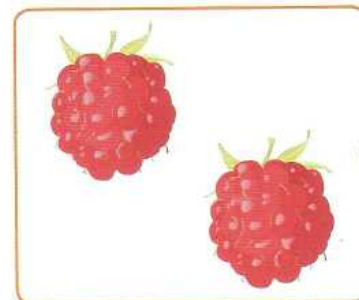
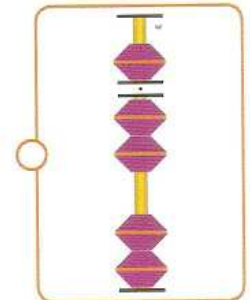
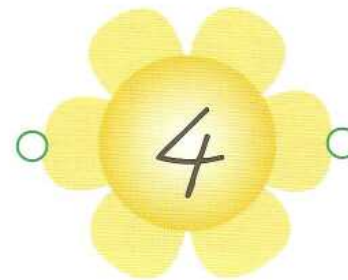
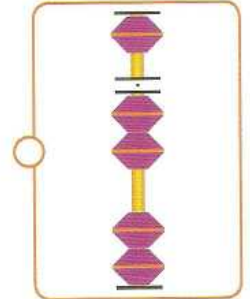
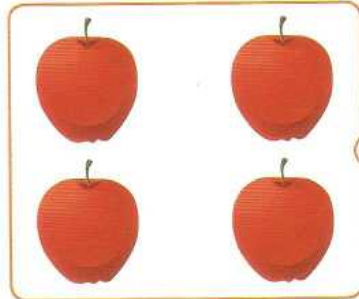
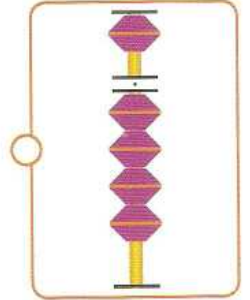
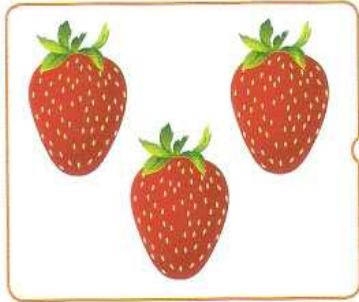
★ Сколько пальм?

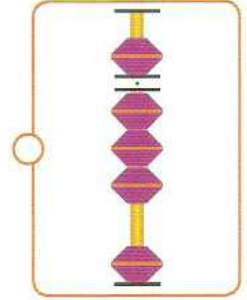
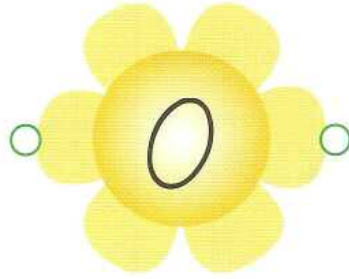
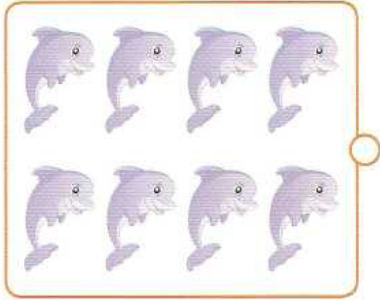
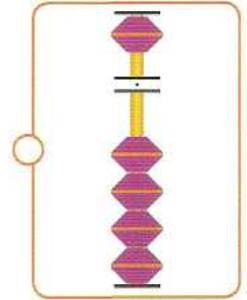
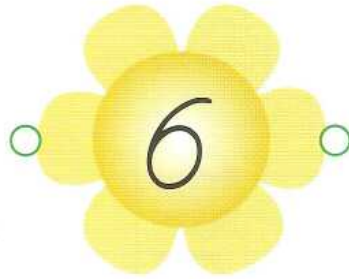
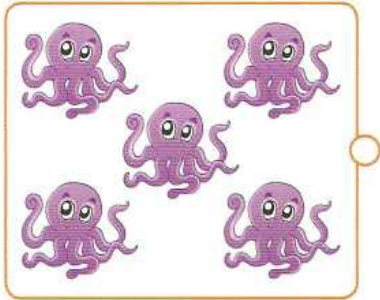
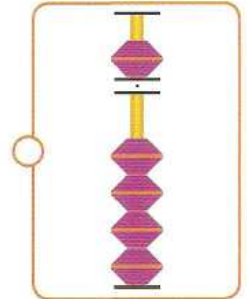
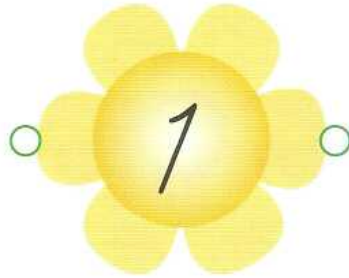
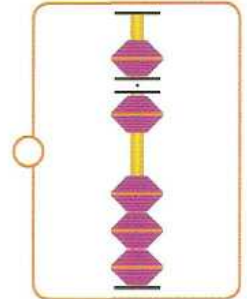
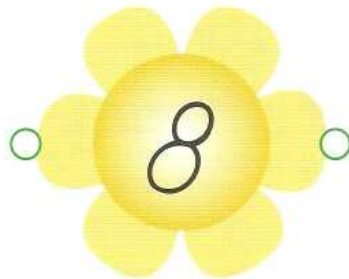
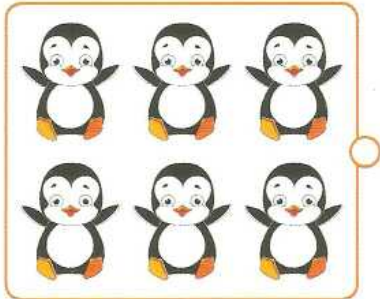
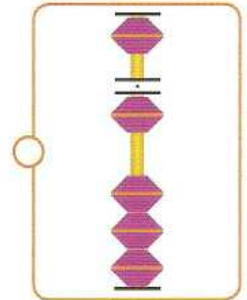
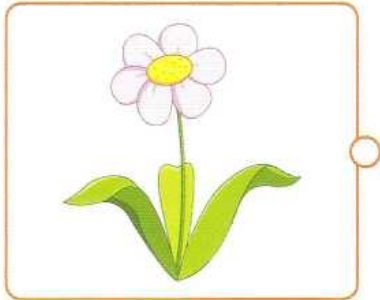
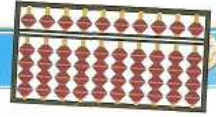
★ Сколько ракушек?

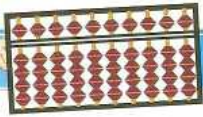




Давайте установим соответствие







Разукрасим нужное количество бусинок и запишем полученное число

Five turtles are shown. To the right is a vertical abacus with 5 beads. Below the abacus is a small empty box for writing the number.

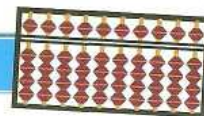
Two bears are shown. To the right is a vertical abacus with 2 beads. Below the abacus is a small empty box for writing the number.

Ten balloons are arranged in three rows (3, 4, 3). To the right is a vertical abacus with 10 beads. Below the abacus is a small empty box for writing the number.

Seven plums are arranged in three rows (3, 2, 2). To the right is a vertical abacus with 7 beads. Below the abacus is a small empty box for writing the number.

Four chicks are arranged in two rows (2, 2). To the right is a vertical abacus with 4 beads. Below the abacus is a small empty box for writing the number.





Vertical counting column with 6 hexagonal cells. The top 3 cells contain black horizontal bars. Below the column is an empty square box for the answer.

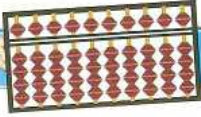
Vertical counting column with 6 hexagonal cells. The top 3 cells contain black horizontal bars. Below the column is an empty square box for the answer.

Vertical counting column with 6 hexagonal cells. The top 3 cells contain black horizontal bars. Below the column is an empty square box for the answer.

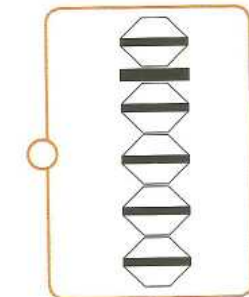
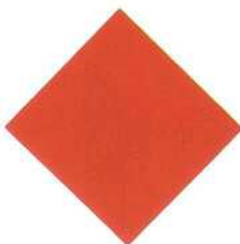
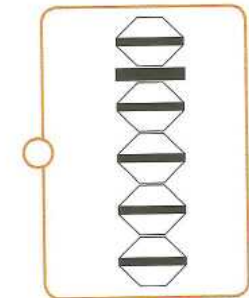
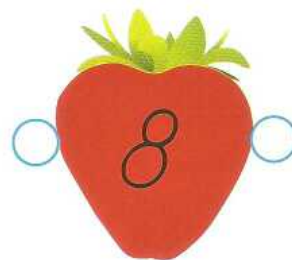
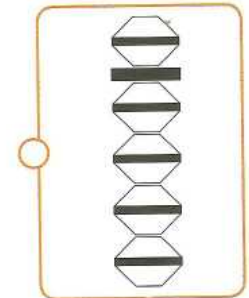
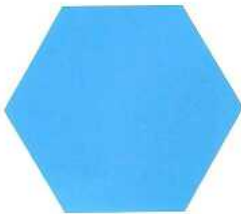
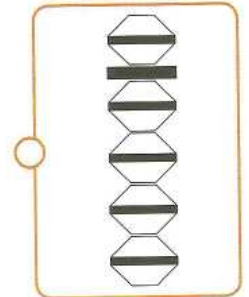
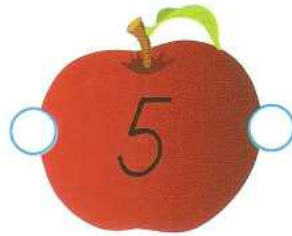
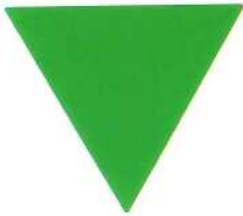
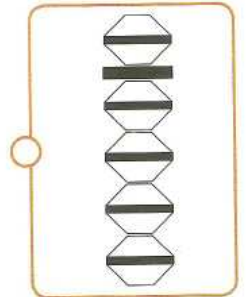
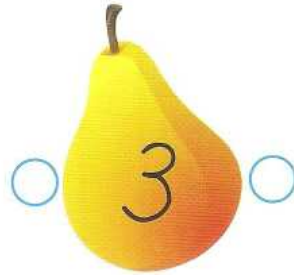
Vertical counting column with 6 hexagonal cells. The top 3 cells contain black horizontal bars. Below the column is an empty square box for the answer.

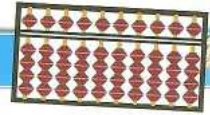
Vertical counting column with 6 hexagonal cells. The top 3 cells contain black horizontal bars. Below the column is an empty square box for the answer.





Для каждого фрукта найдем свою фигуру, посчитав количество их углов. А после закрасим столько же бусинок на Абакусе.





Разукрасим указанное количество бусинок



6



3



1



8



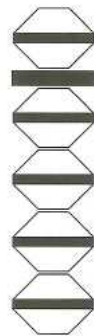
4



7



9



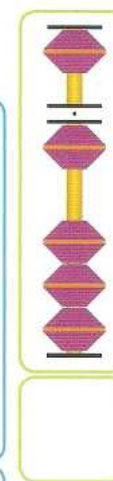
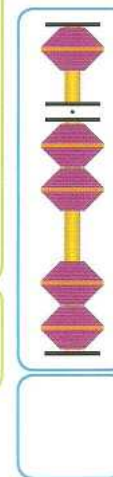
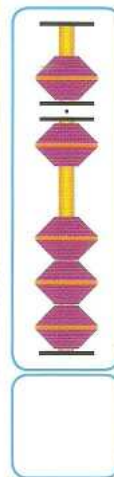
2

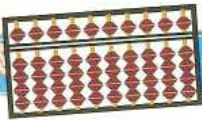


5

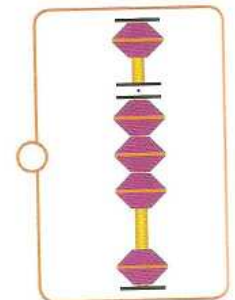
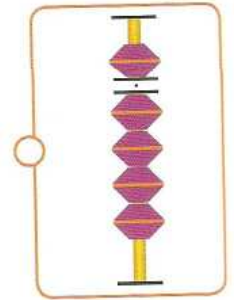
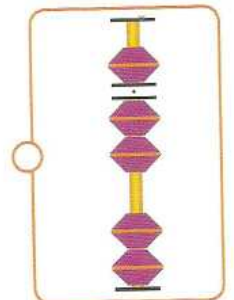
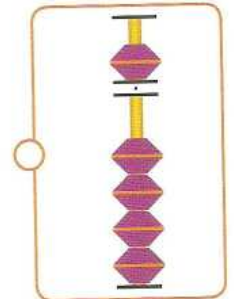
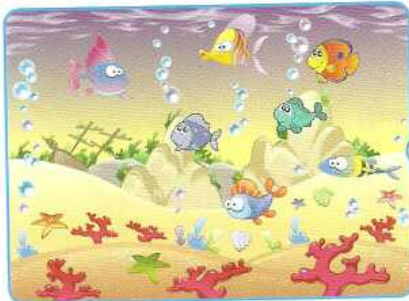
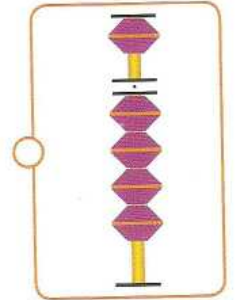


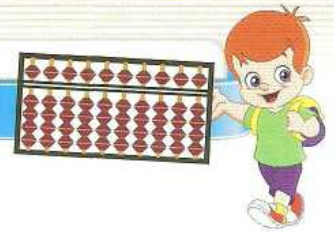
Напишем цифры, указанные на Абакусе





Посчитаем количество рыбок и найдем подходящий Абакус для каждого аквариума





Разукрасим бусинки Абакуса

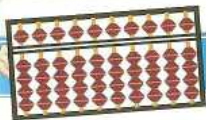
Two rows of abacus beads for coloring. Each row contains 9 vertical rods. Each rod has 5 beads. The beads are arranged in a pattern: the top bead is purple with a yellow horizontal line, the second is black, the third is white with a black horizontal line, the fourth is white with a black horizontal line, and the fifth is white with a black horizontal line. The rods are arranged in a sequence where the number of purple beads varies: 1, 2, 3, 4, 5, 6, 7, 8, 9.



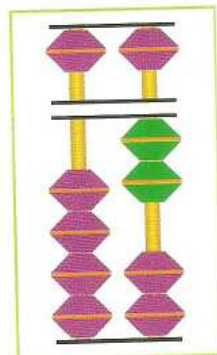
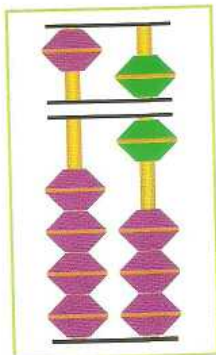
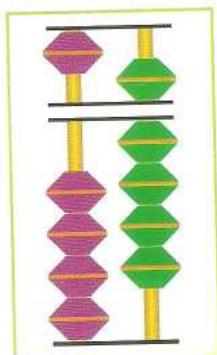
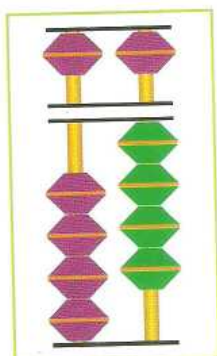
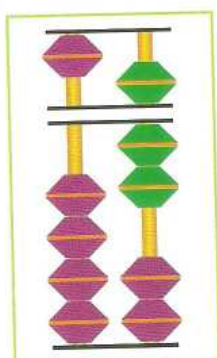
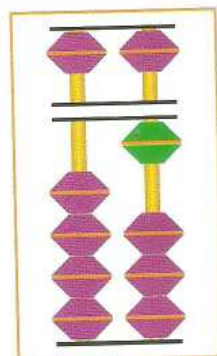
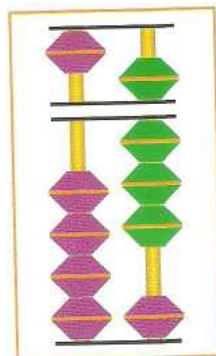
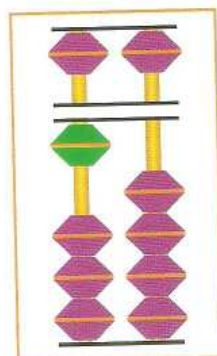
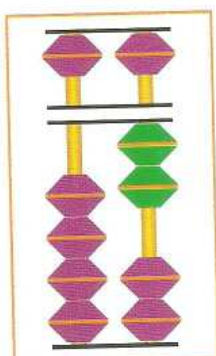
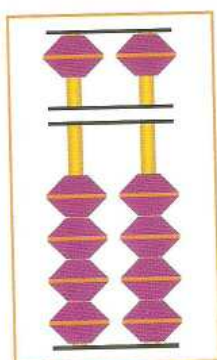
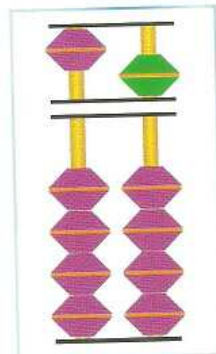
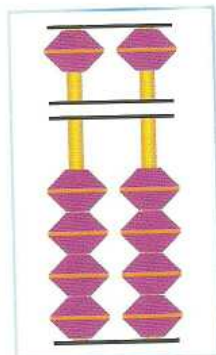
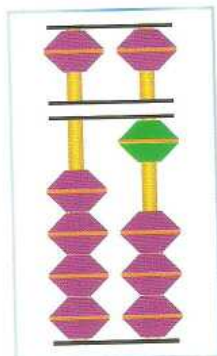
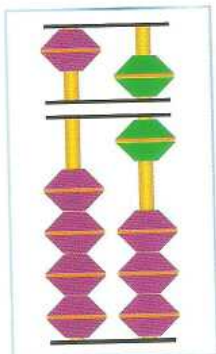
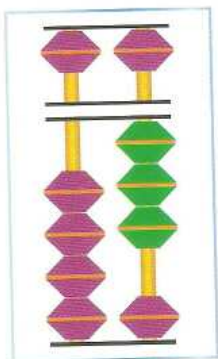
Выпишем пропущенные цифры

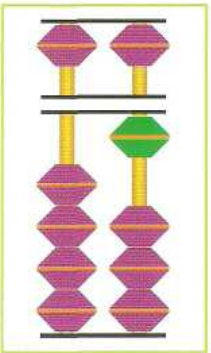
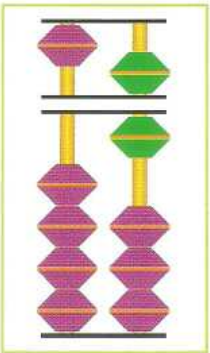
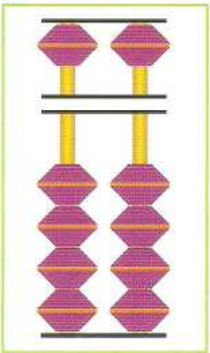
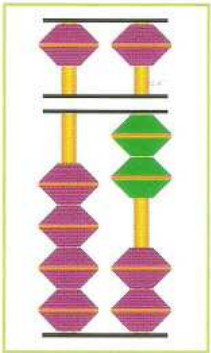
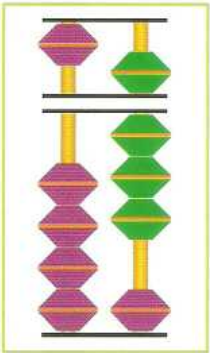
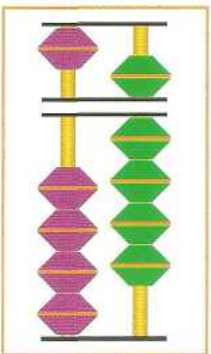
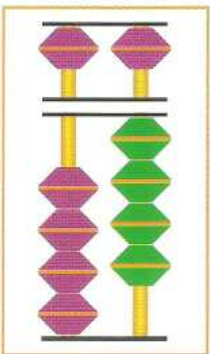
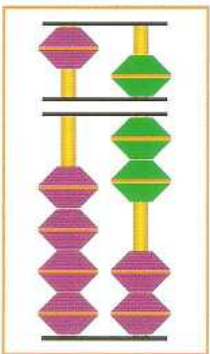
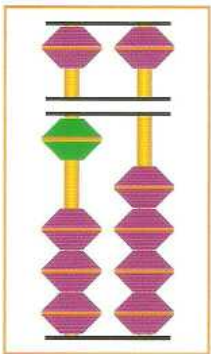
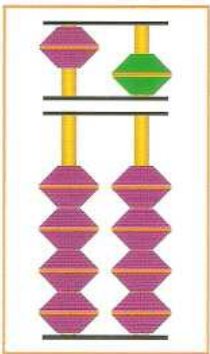
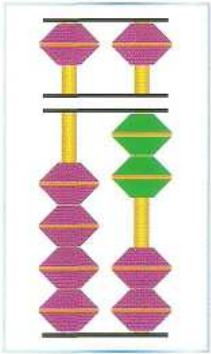
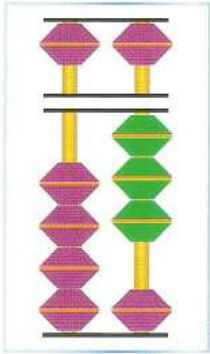
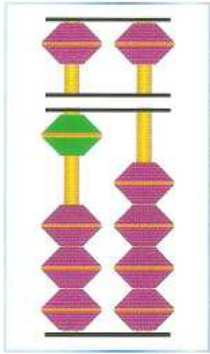
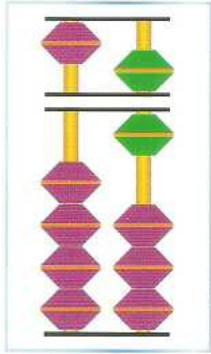
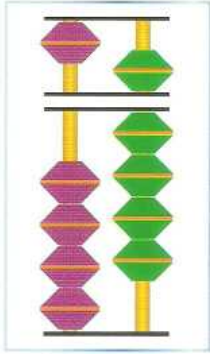
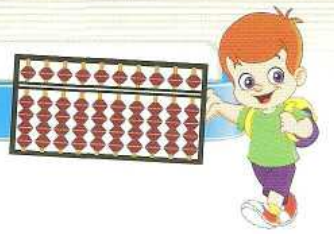
Two rows of train cars for a number sequence. Each row has 10 cars. The first row starts with a train engine and has numbers 2, 4, 5, 8 in the 2nd, 4th, 5th, and 8th cars respectively. The second row has numbers 9, 6, 4, 1 in the 1st, 3rd, 5th, and 9th cars respectively. The missing numbers are 1, 3, 6, 7, 8, 9, 10.

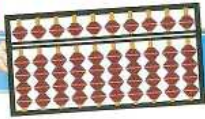




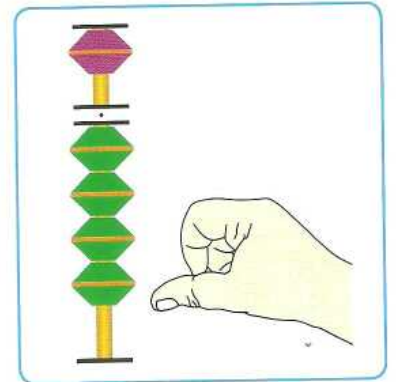
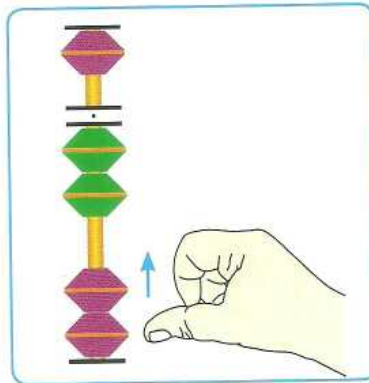
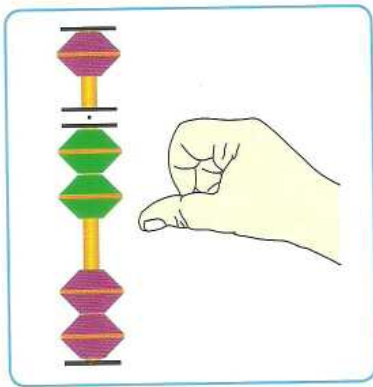
Запишем цифры, указанные на Абакусе



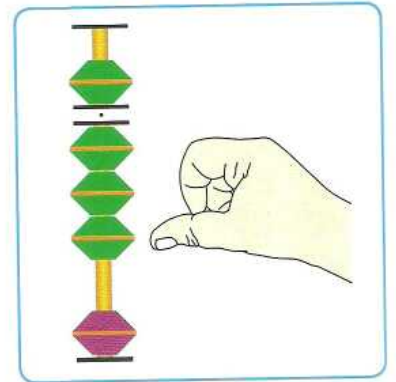
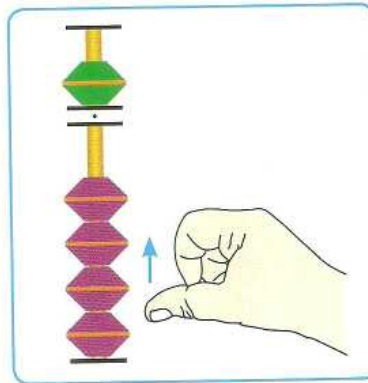
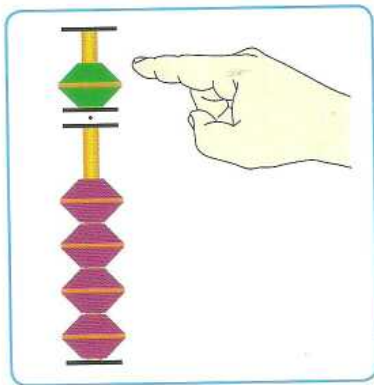




Теперь мы с Вами научимся прибавлять

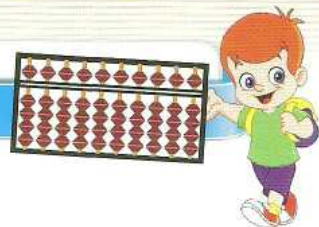


2 + 2 =

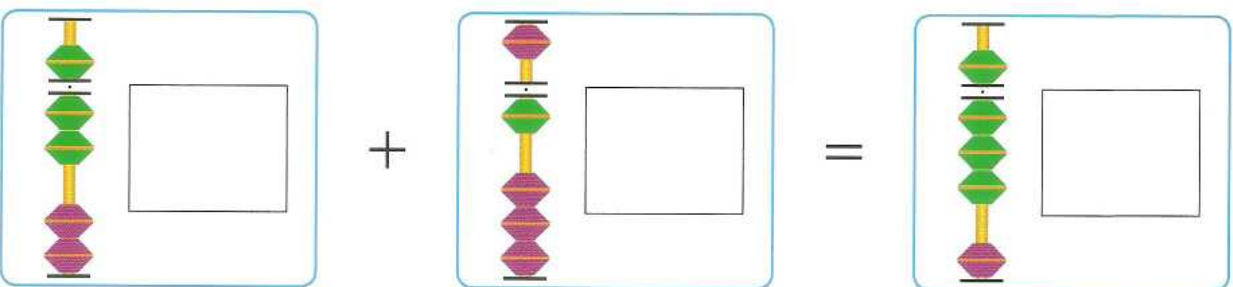
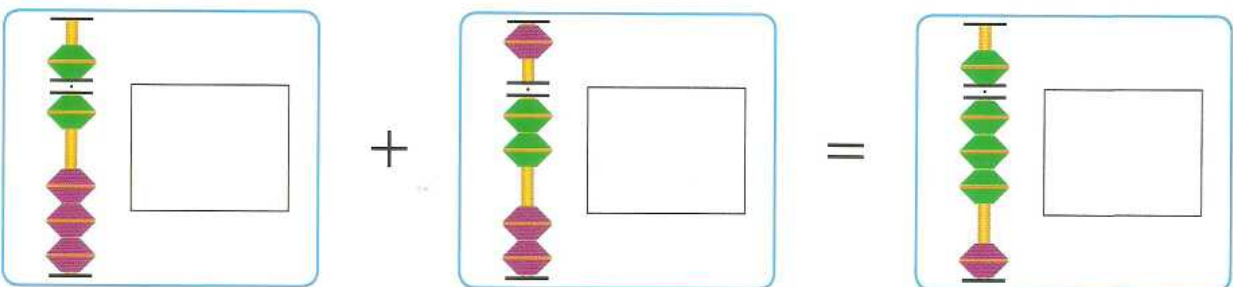
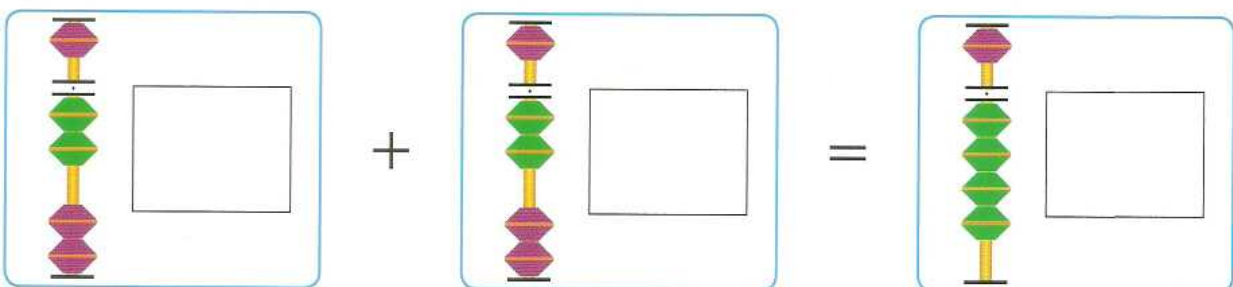
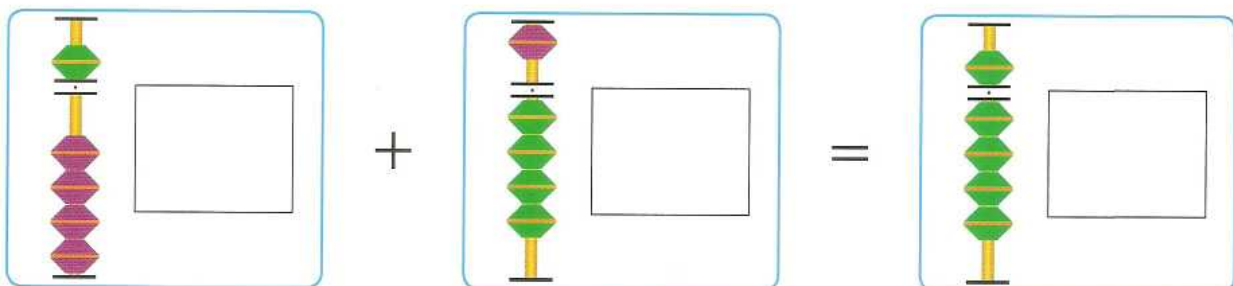
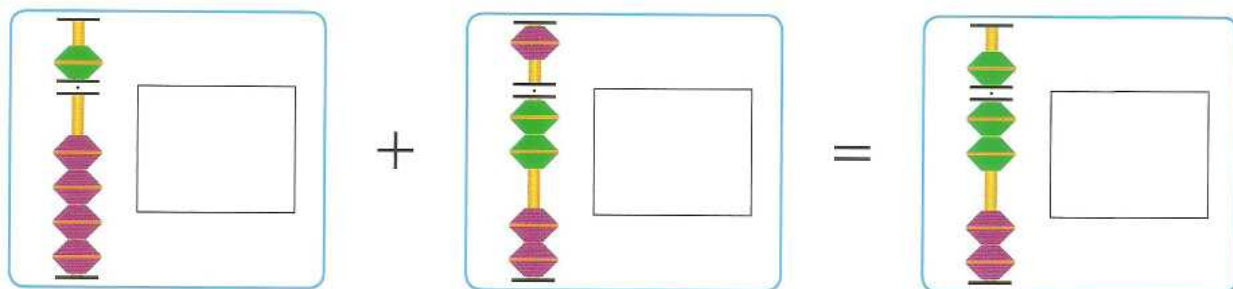


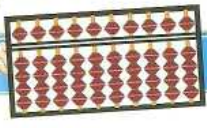
5 + 3 =





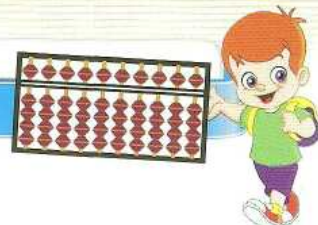
Давайте попробуем сложить на Абакусе





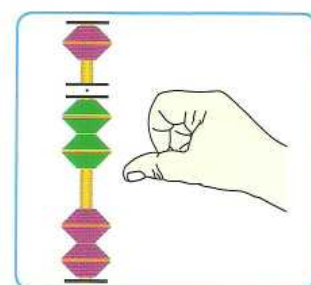
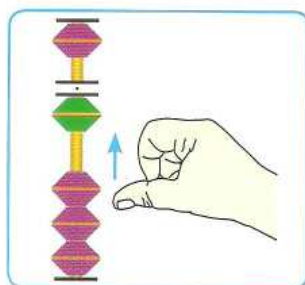
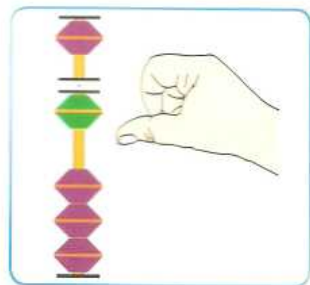
	+		=	
	+		=	
	+		=	
	+		=	
	+		=	



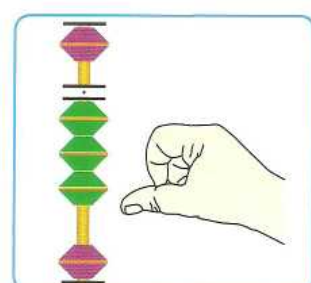
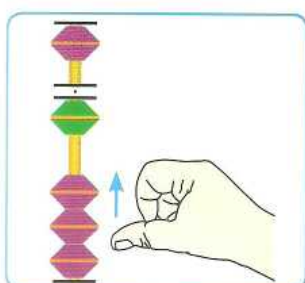
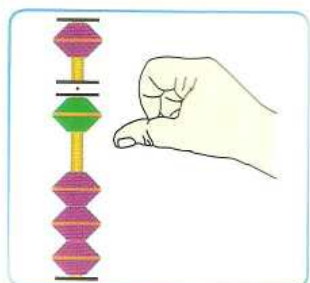


Полученный результат запишем слева

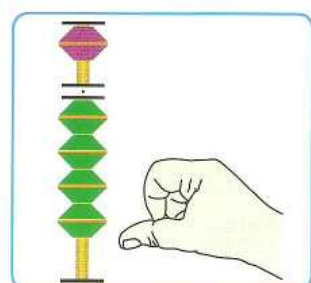
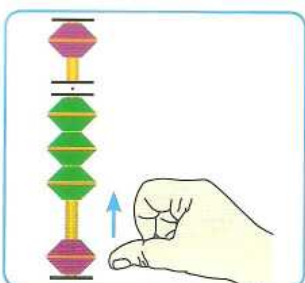
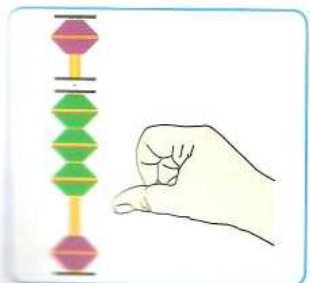
$$\begin{array}{r} 1 \\ + 1 \\ \hline \square \end{array}$$



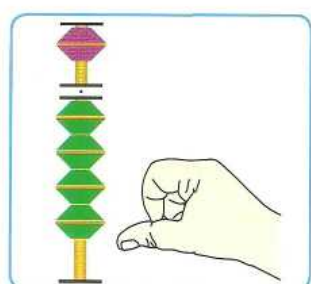
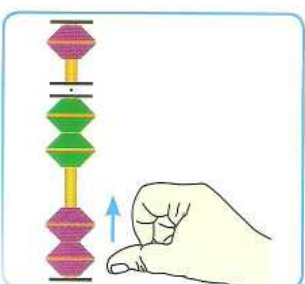
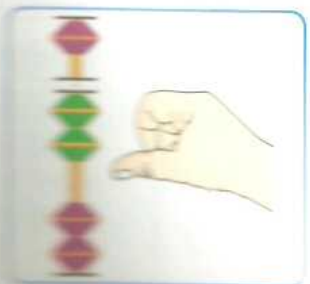
$$\begin{array}{r} 1 \\ + 2 \\ \hline \square \end{array}$$



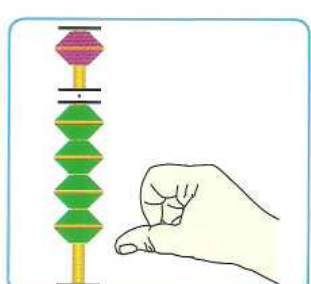
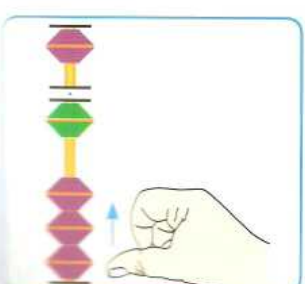
$$\begin{array}{r} 3 \\ + 1 \\ \hline \square \end{array}$$

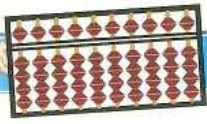


$$\begin{array}{r} 2 \\ + 2 \\ \hline \square \end{array}$$

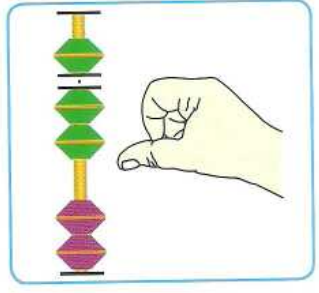
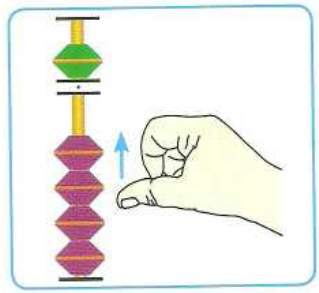
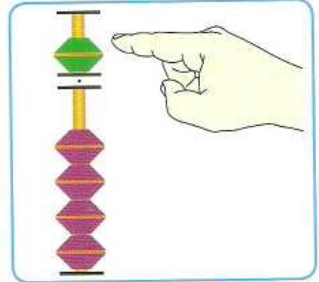


$$\begin{array}{r} 1 \\ + 3 \\ \hline \square \end{array}$$

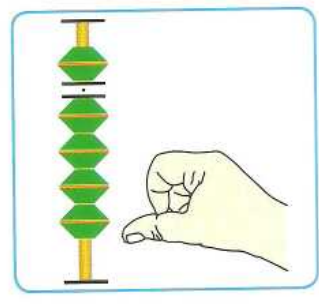
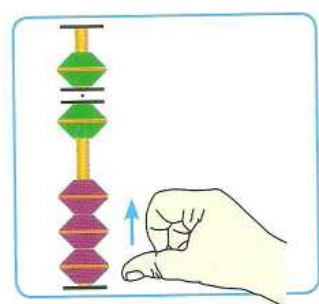
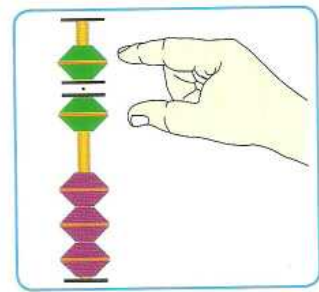




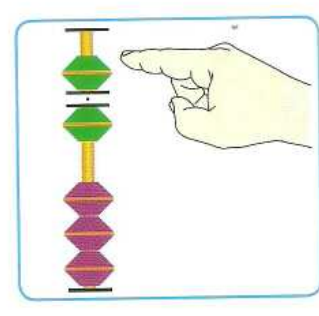
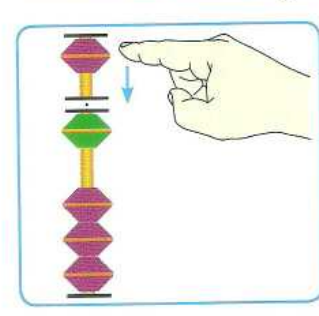
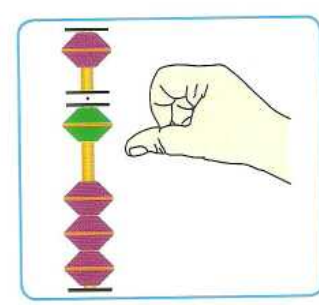
$$\begin{array}{r} 5 \\ + 2 \\ \hline \square \end{array}$$



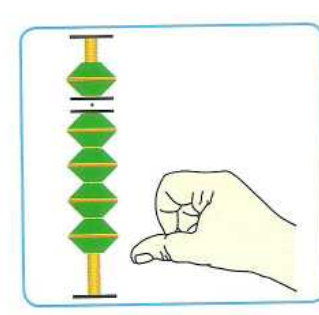
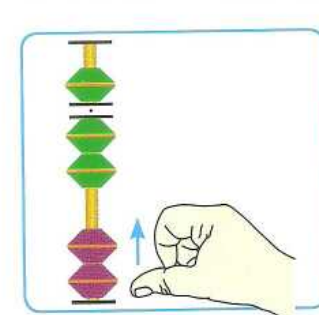
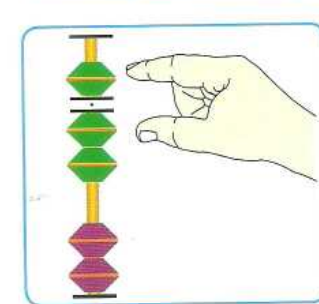
$$\begin{array}{r} 6 \\ + 3 \\ \hline \square \end{array}$$



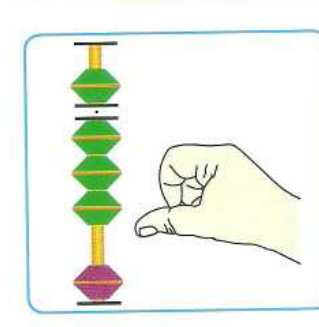
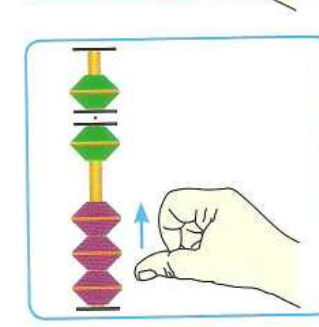
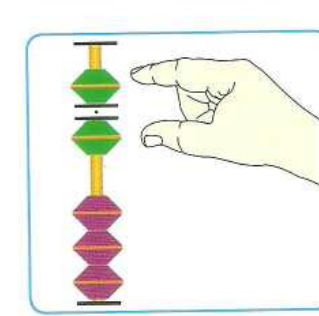
$$\begin{array}{r} 1 \\ + 5 \\ \hline \square \end{array}$$

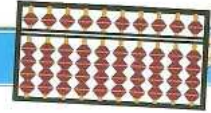


$$\begin{array}{r} 7 \\ + 2 \\ \hline \square \end{array}$$

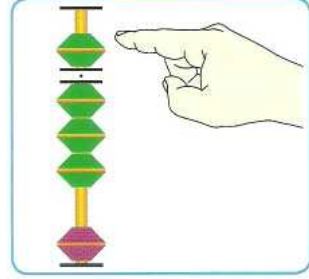
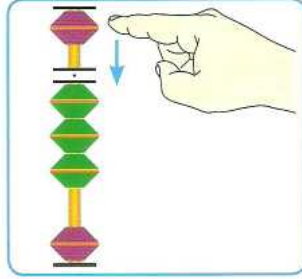
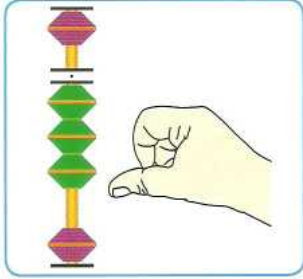


$$\begin{array}{r} 6 \\ + 2 \\ \hline \square \end{array}$$

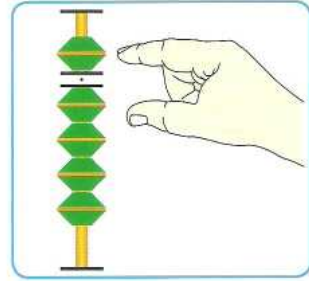
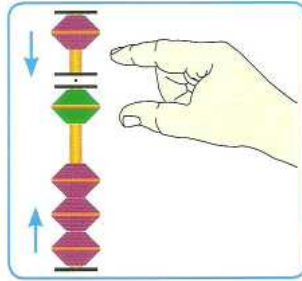
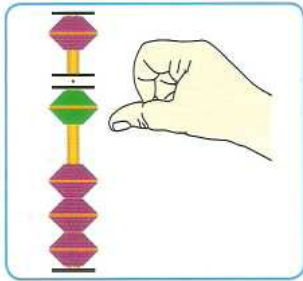




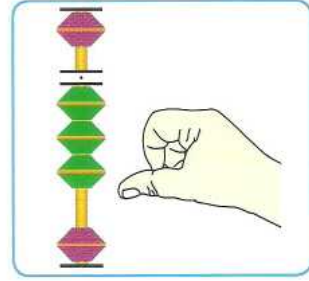
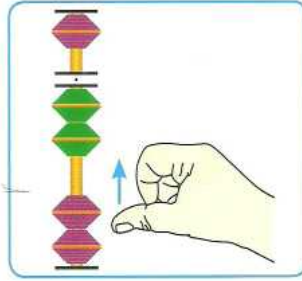
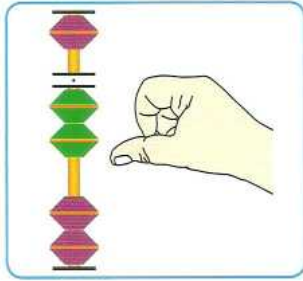
$$\begin{array}{r} 3 \\ + 5 \\ \hline \square \end{array}$$



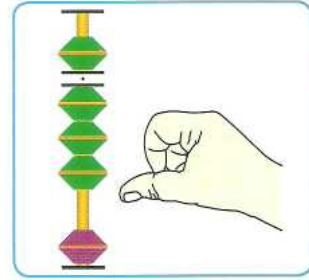
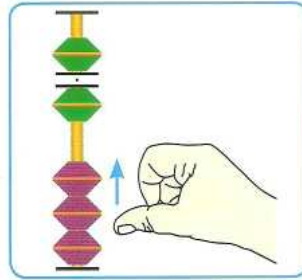
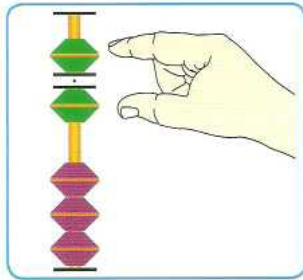
$$\begin{array}{r} 1 \\ + 8 \\ \hline \square \end{array}$$



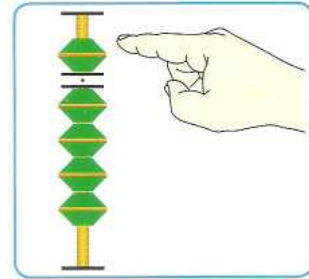
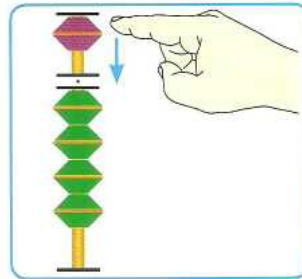
$$\begin{array}{r} 2 \\ + 1 \\ \hline \square \end{array}$$



$$\begin{array}{r} 6 \\ + 2 \\ \hline \square \end{array}$$

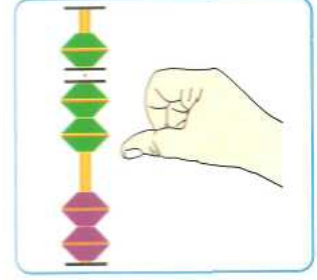
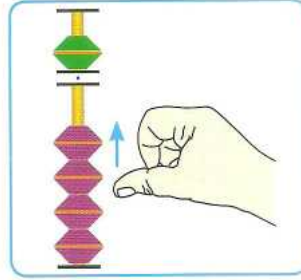
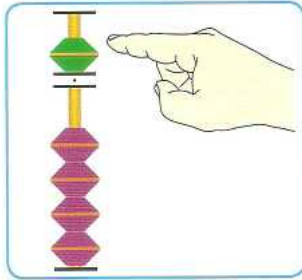


$$\begin{array}{r} 4 \\ + 5 \\ \hline \square \end{array}$$

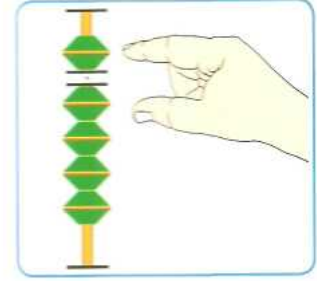
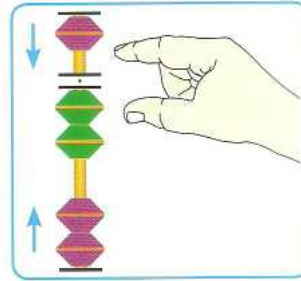
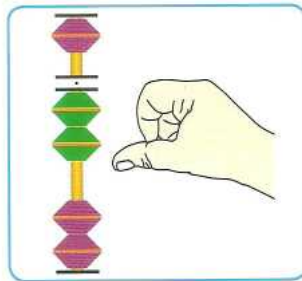




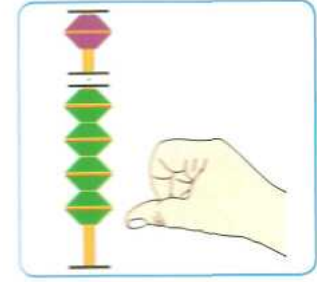
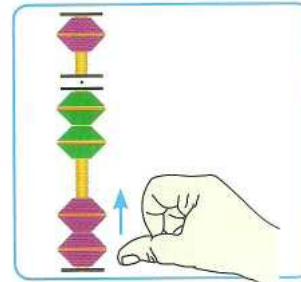
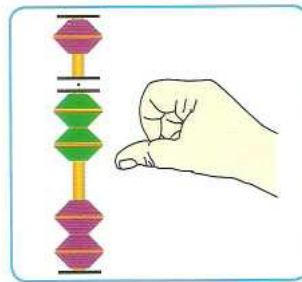
$$\begin{array}{r} 5 \\ + 2 \\ \hline \square \end{array}$$



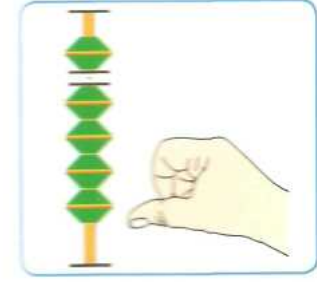
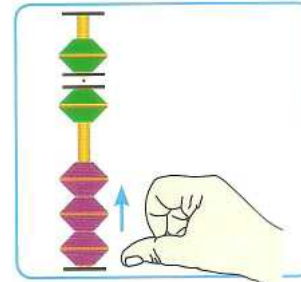
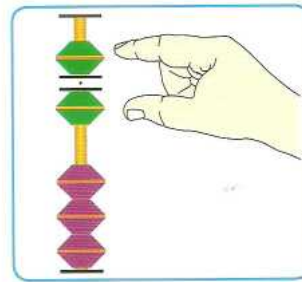
$$\begin{array}{r} 2 \\ + 7 \\ \hline \square \end{array}$$



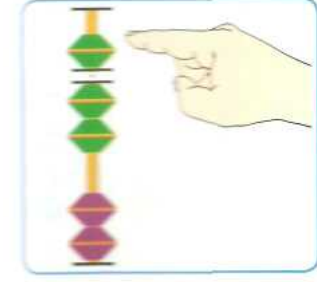
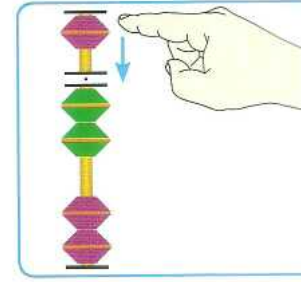
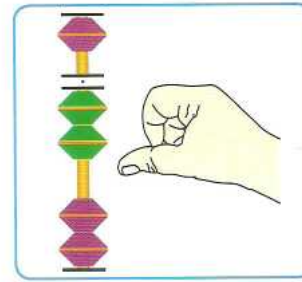
$$\begin{array}{r} 2 \\ + 2 \\ \hline \square \end{array}$$

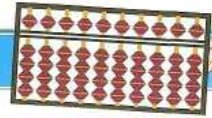


$$\begin{array}{r} 6 \\ + 3 \\ \hline \square \end{array}$$



$$\begin{array}{r} 2 \\ + 5 \\ \hline \square \end{array}$$





Решим примеры с помощью Абакуса

$$3 + 1 = \square$$

$$3 + 5 = \square$$

$$7 + 2 = \square$$

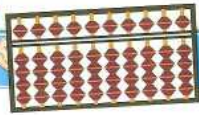
$$4 + 5 = \square$$

$$1 + 2 = \square$$

$$8 + 1 = \square$$

$$6 + 1 = \square$$





Давайте решим следующие примеры

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	1	4	2	2	7	1	5	7	8	6
<i>b</i>	5	5	2	1	2	8	3	1	1	3
Ответ										

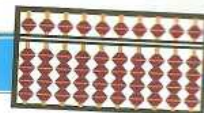
№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	5	1	7	4	6	2	2	8	6	5
<i>b</i>	2	3	2	5	2	7	2	1	1	3
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	4	3	5	3	6	1	1	8	1	1
<i>b</i>	5	5	2	1	2	8	3	1	1	2
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	1	2	3	2	6	1	5	6	7	5
<i>b</i>	1	2	1	5	2	8	4	1	1	3
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	2	7	5	3	6	1	2	8	1	2
<i>b</i>	2	2	2	1	2	3	1	1	1	5
Ответ										





№	1	2	3	4	5	6	7	8	9	10
a	5	5	2	1	2	8	3	1	1	3
b	1	4	2	2	7	1	5	7	8	6
Ответ										

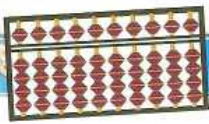
№	1	2	3	4	5	6	7	8	9	10
a	2	3	2	5	2	7	2	1	6	5
b	5	1	2	4	6	2	2	8	1	3
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	5	4	1	4	3	1	1	8	1	1
b	3	5	2	5	1	8	3	1	1	2
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	2	5	5	4	7	1	1	6	7	5
b	1	2	1	5	2	8	2	1	1	3
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	3	6	7	5	6	5	8	2	1	4
b	1	2	2	1	2	3	1	1	1	5
Ответ										





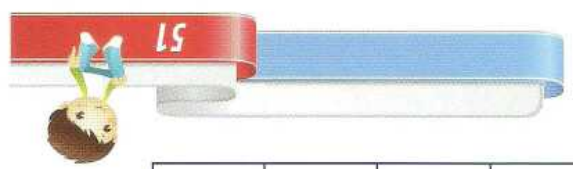
№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	1	2	2	2	2	1	5	7	5	1
<i>b</i>	5	2	1	1	5	2	1	1	1	3
<i>c</i>	1	5	5	1	2	5	3	1	1	5
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	1	2	2	2	6	1	5	6	2	5
<i>b</i>	5	5	1	5	2	6	3	1	1	2
<i>c</i>	2	2	1	1	1	2	1	1	1	2
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	1	2	2	2	6	1	5	7	2	6
<i>b</i>	5	5	2	1	2	2	3	1	1	2
<i>c</i>	1	1	5	5	1	5	1	1	5	1
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	2	6	2	2	5	1	5	2	5	1
<i>b</i>	2	2	2	1	3	1	3	1	1	3
<i>c</i>	5	1	5	6	1	1	1	1	1	5
Ответ										



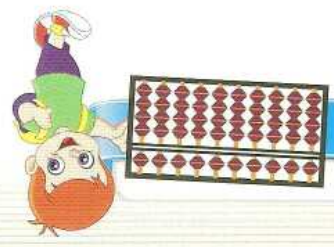


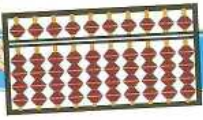
										Омект
	6	2	1	1	1	1	6	5	1	с
	2	1	5	2	2	3	1	2	1	а
	1	5	2	5	1	5	2	2	6	а
	10	9	8	7	6	5	4	3	2	№а

										Омект
	1	5	1	1	5	1	5	5	1	с
	1	2	1	2	2	2	3	6	6	а
	6	2	6	6	2	6	2	1	2	а
	10	9	8	7	6	5	4	3	2	№а

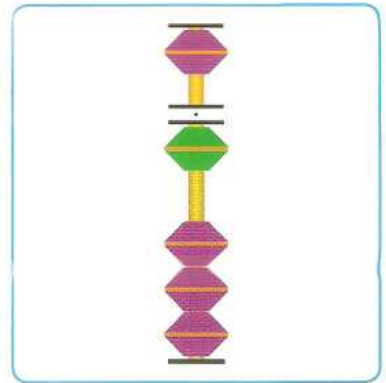
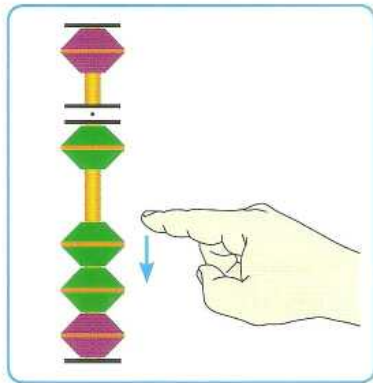
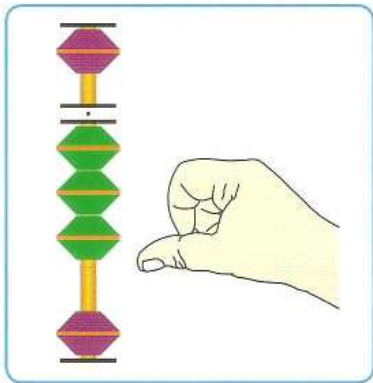
										Омект
	1	1	1	1	2	5	1	5	1	с
	2	1	1	3	5	1	1	1	5	а
	5	2	6	5	1	3	2	2	1	а
	10	9	8	7	6	5	4	3	2	№а

										Омект
	6	1	1	2	5	2	5	5	1	с
	2	1	1	1	2	2	1	2	1	а
	1	2	6	5	1	5	2	2	5	а
	10	9	8	7	6	5	4	3	2	№а

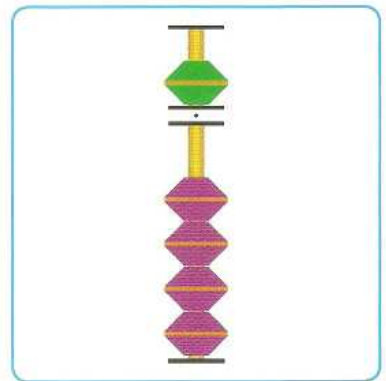
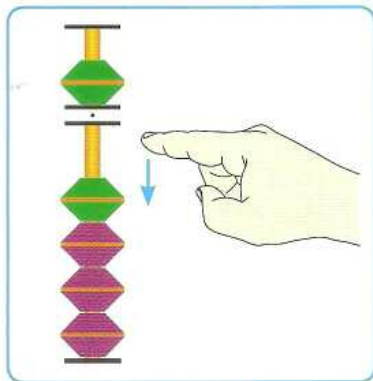
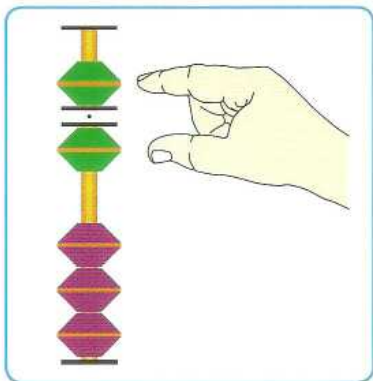




Пришло время научиться вычитать на Абакусе



3 - 2 =

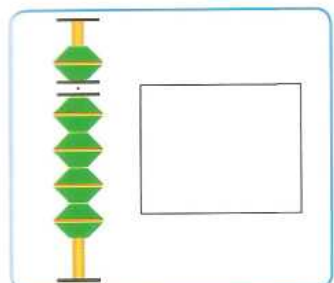
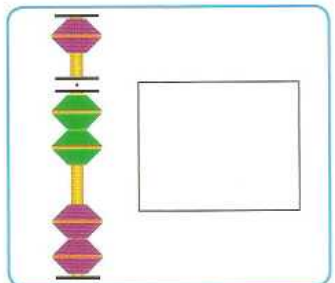
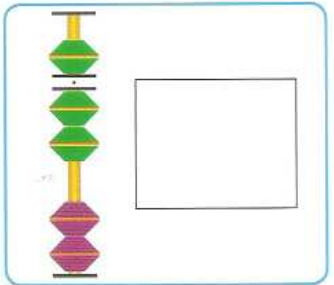


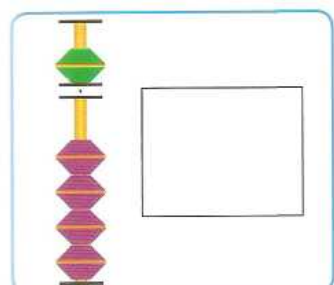
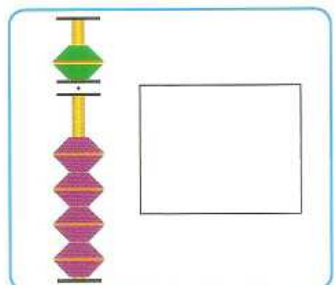
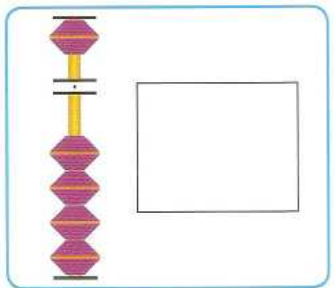
6 - 1 =

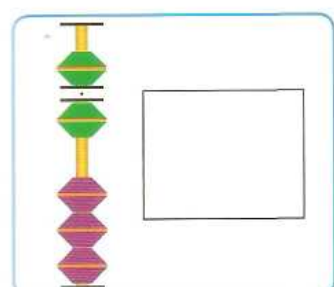
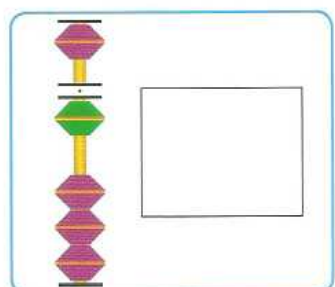
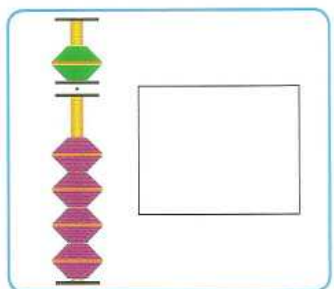


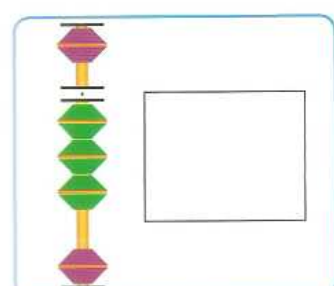
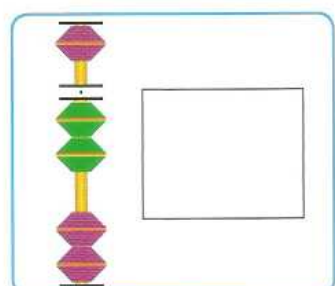
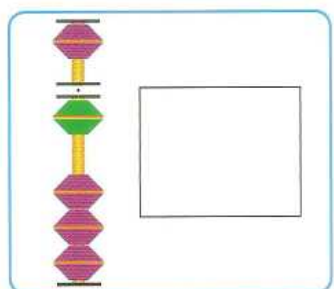


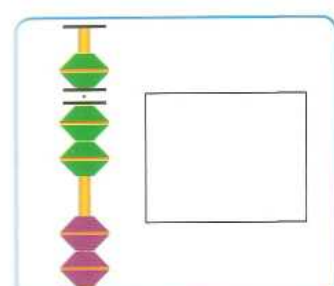
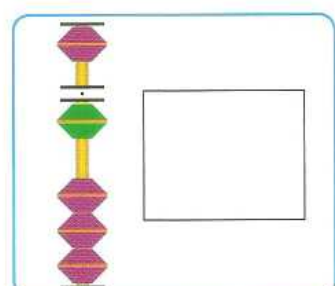
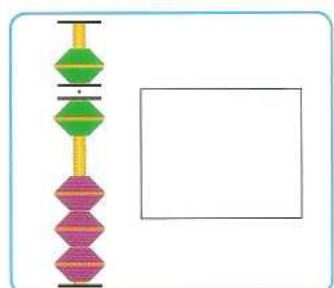
Решим примеры на вычитание

 $-$  $=$ 

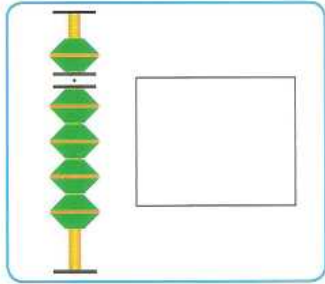
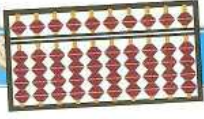
 $-$  $=$ 

 $-$  $=$ 

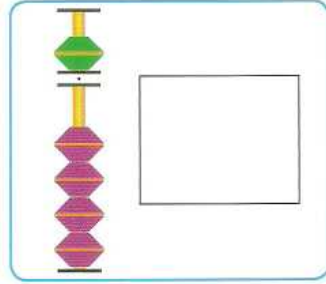
 $-$  $=$ 

 $-$  $=$ 

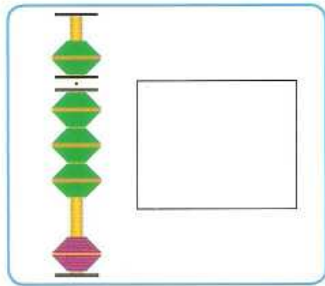
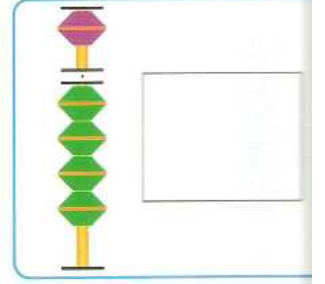




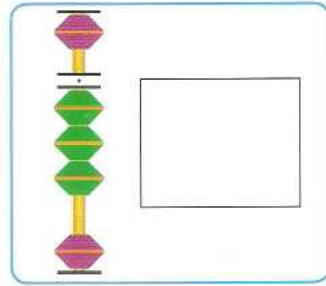
-



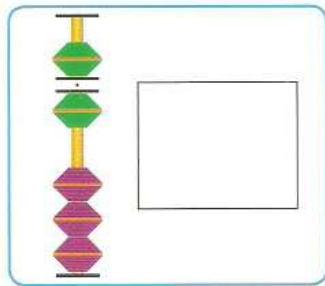
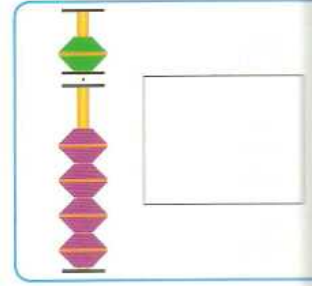
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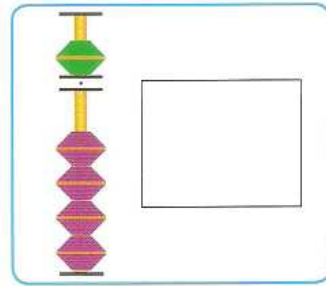
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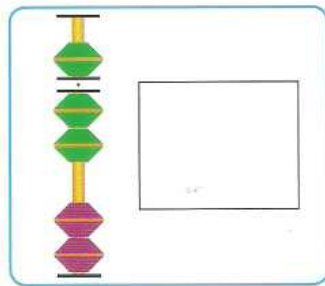
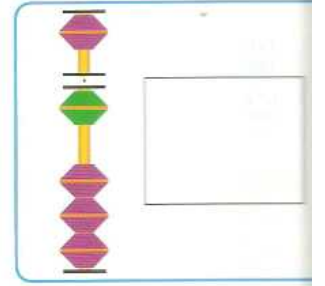
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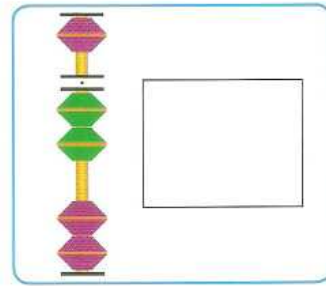
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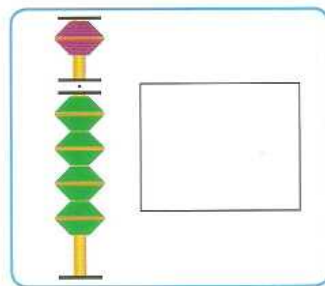
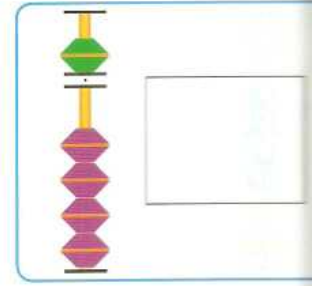
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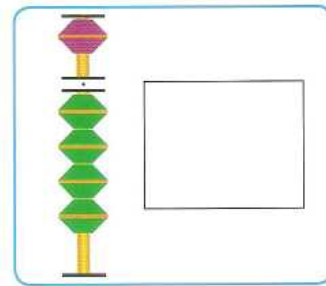
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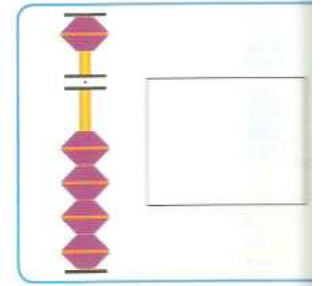
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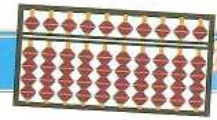


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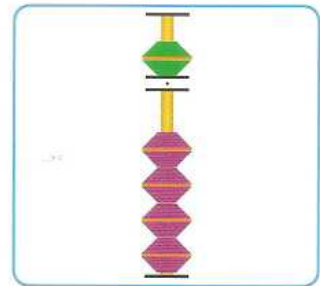
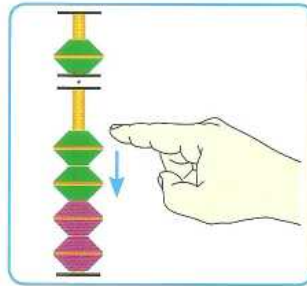
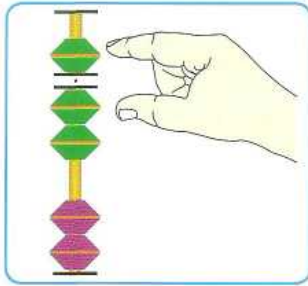
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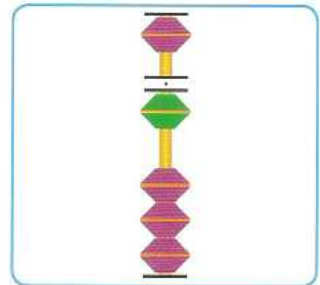
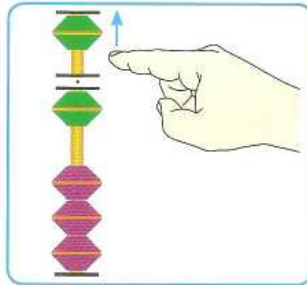
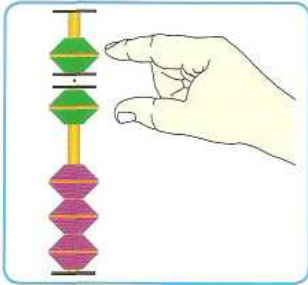


Запишем полученный результат

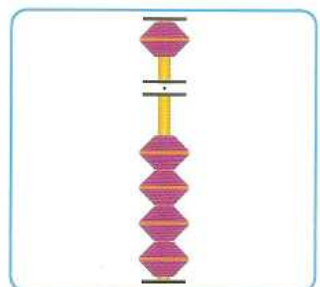
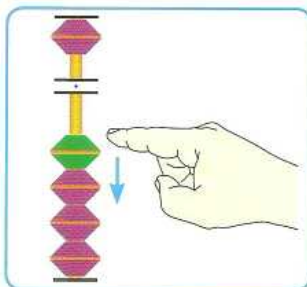
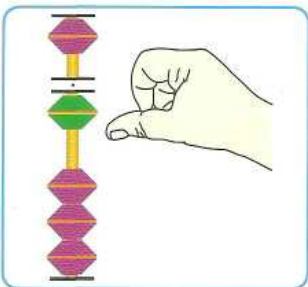
$$\begin{array}{r} 7 \\ - 2 \\ \hline \square \end{array}$$



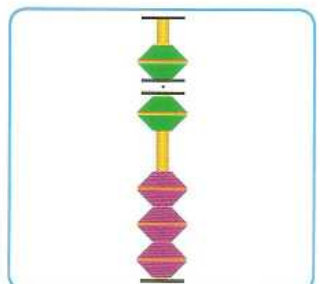
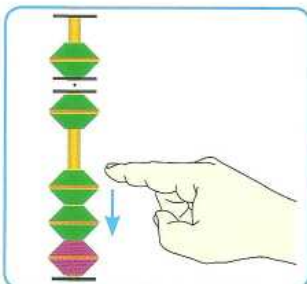
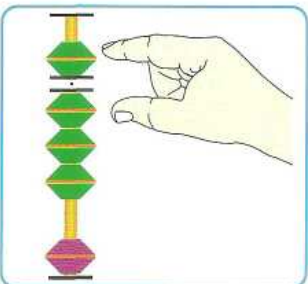
$$\begin{array}{r} 6 \\ - 5 \\ \hline \square \end{array}$$



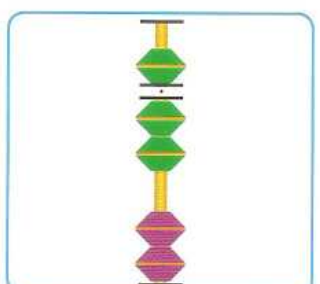
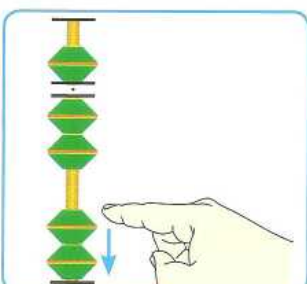
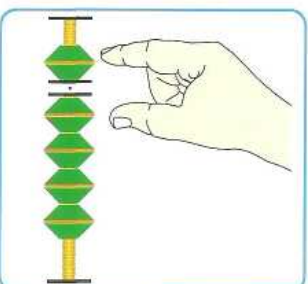
$$\begin{array}{r} 1 \\ - 1 \\ \hline \square \end{array}$$

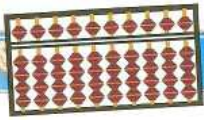


$$\begin{array}{r} 8 \\ - 2 \\ \hline \square \end{array}$$

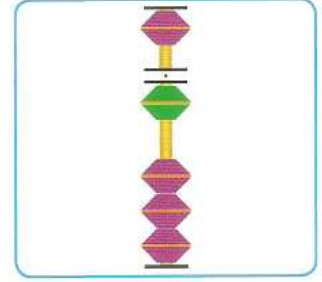
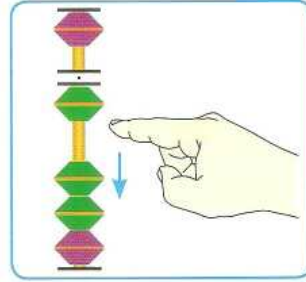
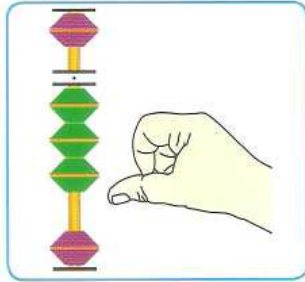


$$\begin{array}{r} 9 \\ - 2 \\ \hline \square \end{array}$$

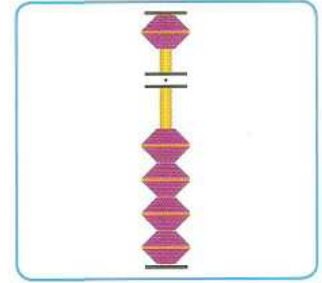
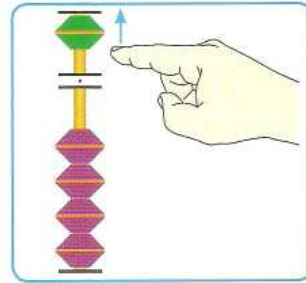
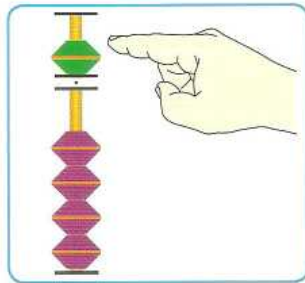




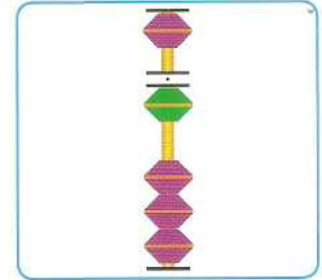
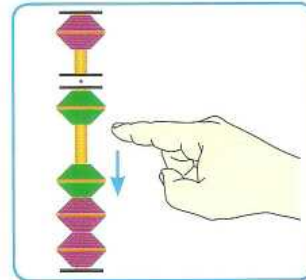
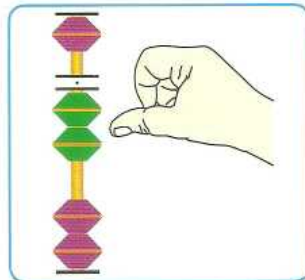
$$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array}$$



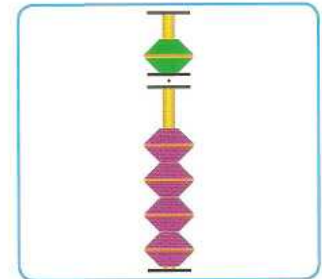
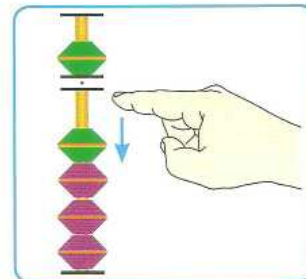
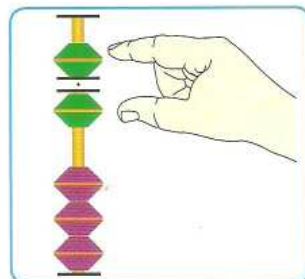
$$\begin{array}{r} 5 \\ - 5 \\ \hline \end{array}$$



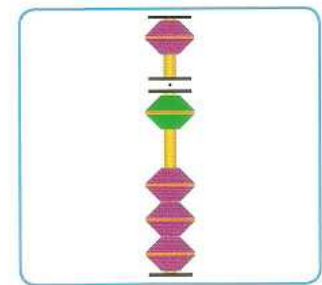
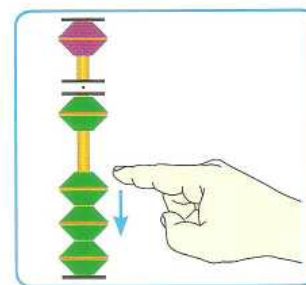
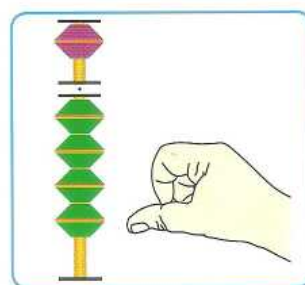
$$\begin{array}{r} 2 \\ - 1 \\ \hline \end{array}$$



$$\begin{array}{r} 6 \\ - 1 \\ \hline \end{array}$$

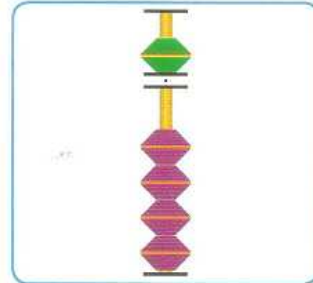
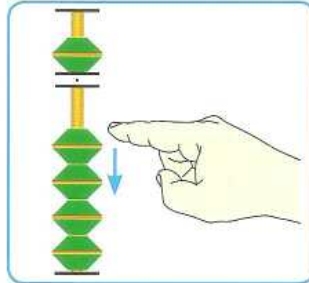
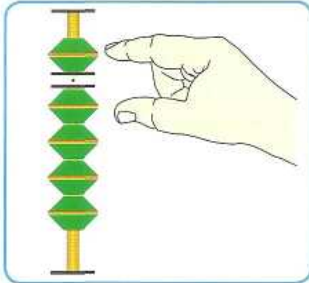


$$\begin{array}{r} 4 \\ - 3 \\ \hline \end{array}$$

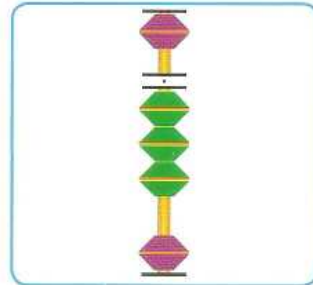
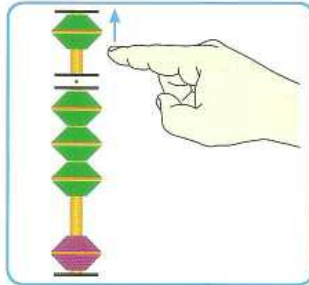
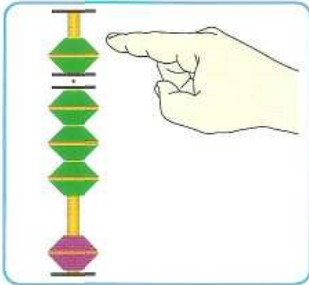




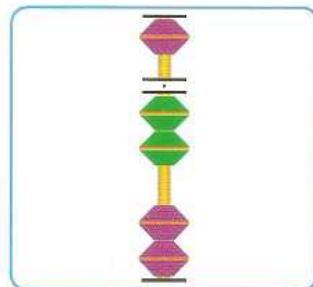
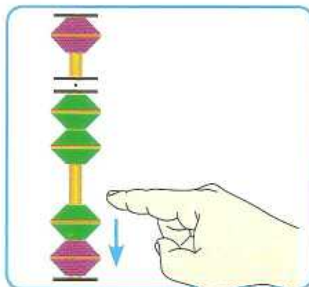
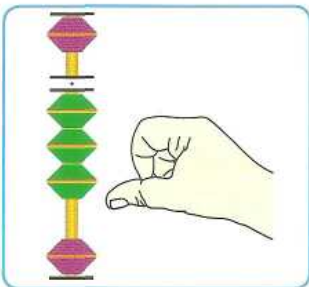
$$\begin{array}{r} 9 \\ - 4 \\ \hline \square \end{array}$$



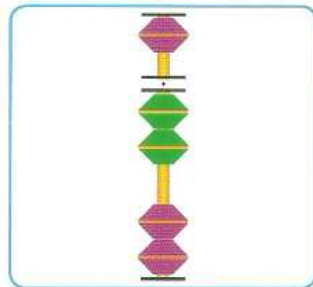
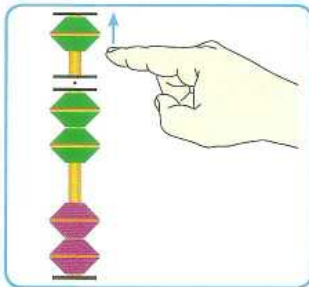
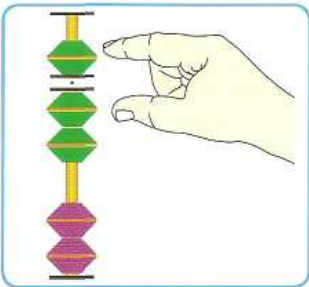
$$\begin{array}{r} 8 \\ - 5 \\ \hline \square \end{array}$$



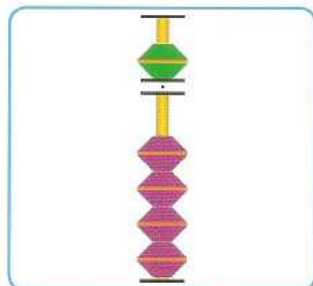
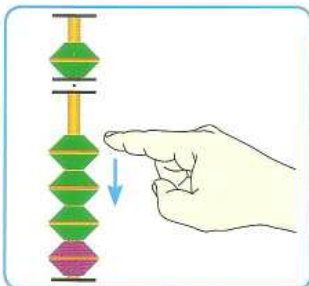
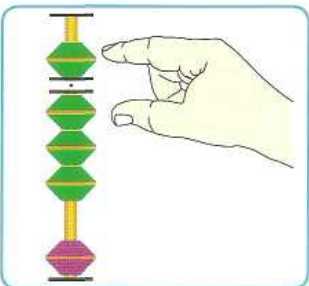
$$\begin{array}{r} 3 \\ - 1 \\ \hline \square \end{array}$$

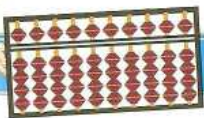


$$\begin{array}{r} 7 \\ - 5 \\ \hline \square \end{array}$$



$$\begin{array}{r} 8 \\ - 3 \\ \hline \square \end{array}$$





Решим примеры с помощью Абакуса

$$3 - 1 = \square$$

$$9 - 5 = \square$$

$$7 - 2 = \square$$

$$6 - 5 = \square$$

$$8 - 3 = \square$$

$$3 - 2 = \square$$

$$4 - 1 = \square$$





Решим примеры на вычитание

№	1	2	3	4	5	6	7	8	9	10
a	6	4	2	2	7	9	6	7	8	3
b	-1	-2	-2	-1	-2	-2	-5	-1	-2	-2
Ответ										

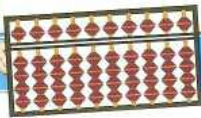
№	1	2	3	4	5	6	7	8	9	10
a	3	4	2	9	8	9	9	7	5	6
b	-1	-1	-1	-1	-3	-4	-2	-5	-5	-5
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	6	4	6	9	8	9	9	7	2	3
b	-5	-3	-1	-1	-2	-3	-4	-1	-2	-2
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	1	4	4	2	3	8	6	3	9	3
b	-1	-4	-2	-1	-2	-1	-5	-1	-2	-3
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	6	4	9	8	7	9	8	9	8	5
b	-6	-3	-9	-8	-6	-6	-6	-8	-5	-5
Ответ										





№	1	2	3	4	5	6	7	8	9	10
a	6	4	2	3	7	8	6	7	8	8
b	-5	-1	-1	-1	-2	-2	-1	-1	-5	-1
Ответ										

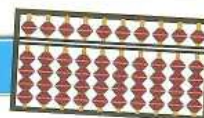
№	1	2	3	4	5	6	7	8	9	10
a	4	3	2	9	8	9	9	7	9	8
b	-1	-1	-1	-5	-2	-4	-3	-1	-5	-5
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	7	3	6	7	8	9	4	8	3	2
b	-5	-3	-1	-1	-2	-3	-4	-1	-2	-2
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	1	9	3	2	4	9	6	3	7	8
b	-1	-4	-2	-1	-2	-1	-5	-1	-2	-3
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	6	3	9	8	7	8	9	9	5	9
b	-6	-3	-9	-8	-6	-6	-6	-1	-5	-5
Ответ										





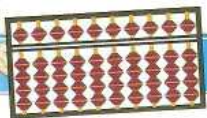
№	1	2	3	4	5	6	7	8	9	10
a	1	2	2	2	7	1	5	7	5	1
b	5	2	1	5	2	2	1	1	1	3
c	-5	-2	-1	-2	-7	-3	-1	-6	-6	-4
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	4	7	8	3	6	5	8	5	9	6
b	5	2	1	5	2	2	1	2	-1	3
c	-4	-2	-5	-3	-7	-5	-1	-6	-1	-4
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	4	5	2	2	7	2	8	1	2	5
b	5	2	6	7	1	2	1	1	1	3
c	-9	-5	-8	-2	-7	-3	-5	-1	-2	-2
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	8	5	7	3	7	2	6	6	2	5
b	1	4	1	5	2	2	1	1	-1	3
c	-5	-2	-1	-2	-6	-4	-2	-6	-1	-1
Ответ										





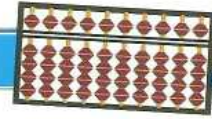
№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	4	5	5	4	7	2	6	8	7	6
<i>b</i>	5	2	1	5	2	2	1	1	1	3
<i>c</i>	-5	-2	-1	-2	-7	-3	-1	-6	-6	-4
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	1	6	6	4	6	5	8	5	9	5
<i>b</i>	8	2	1	5	3	4	1	3	-2	3
<i>c</i>	-4	-2	-5	-3	-7	-5	-1	-6	-1	-3
Ответ										

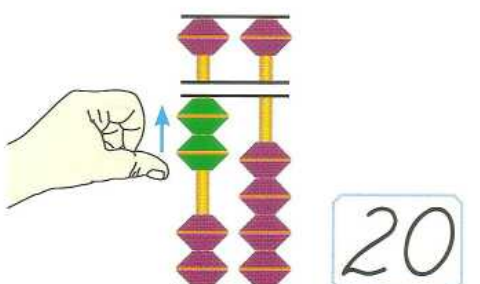
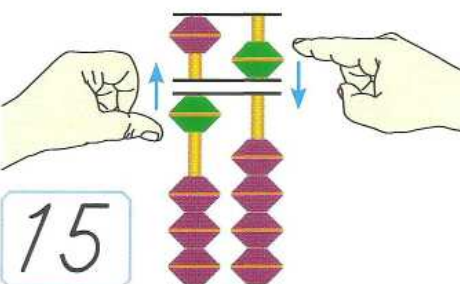
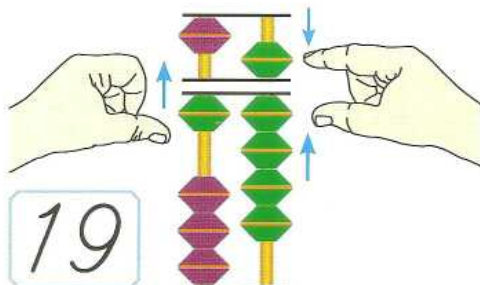
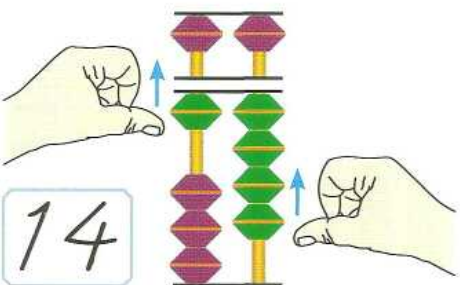
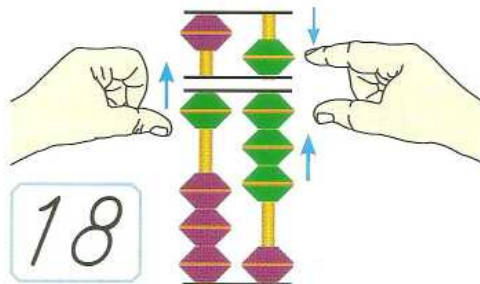
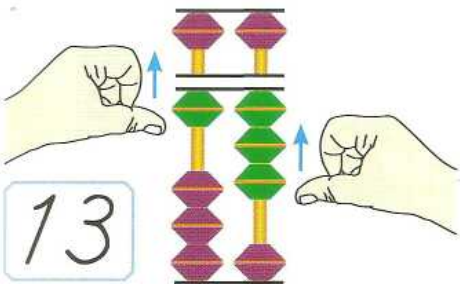
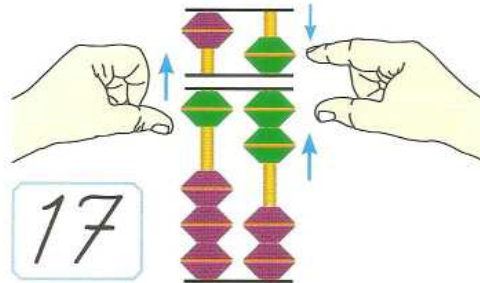
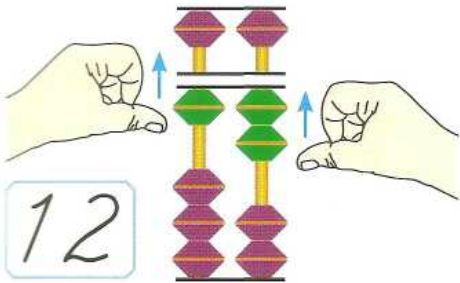
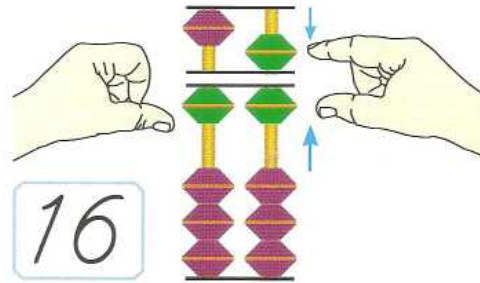
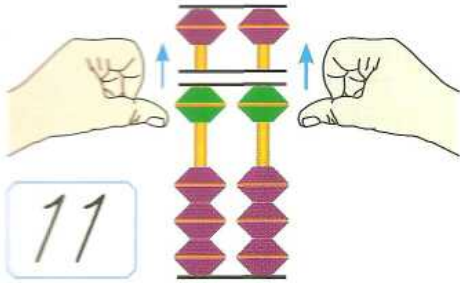
№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	4	5	2	1	7	2	8	8	3	6
<i>b</i>	5	4	7	7	2	2	1	1	1	3
<i>c</i>	-9	-5	-8	-2	-7	-2	-5	-1	-2	-2
Ответ										

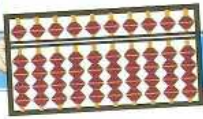
№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	7	5	7	2	7	2	8	7	3	5
<i>b</i>	1	3	2	5	2	2	1	1	-1	4
<i>c</i>	-5	-2	-1	-2	-5	-4	-2	-6	-1	-1
Ответ										





Теперь мы познакомимся с двухзначными числами с помощью Абакуса





Разукрасим бусинки и запишем числа

11			19
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16			13
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20			17
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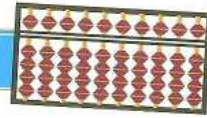
12			14
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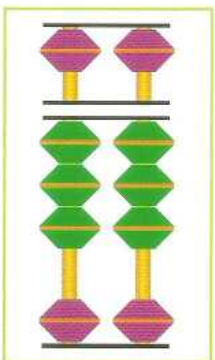
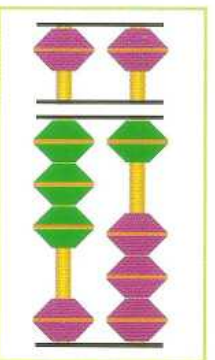
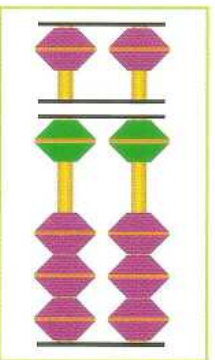
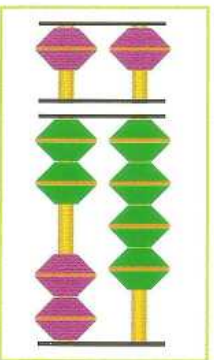
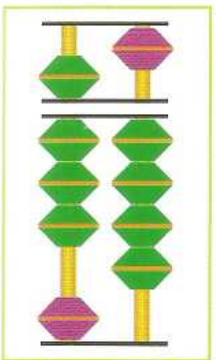
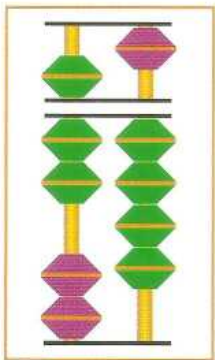
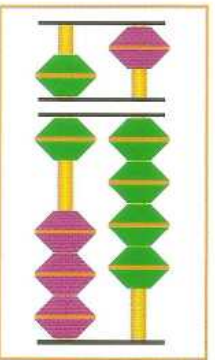
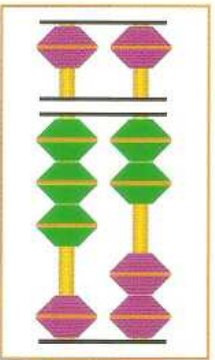
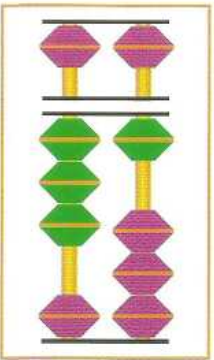
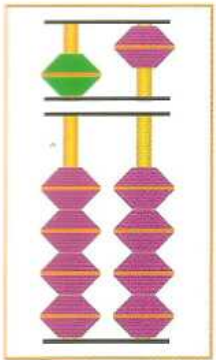
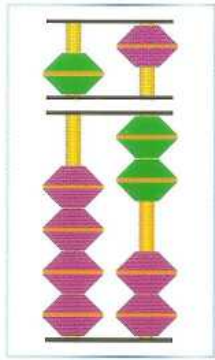
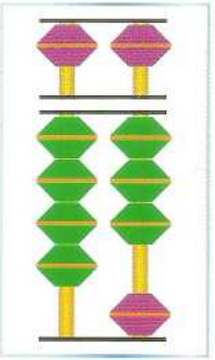
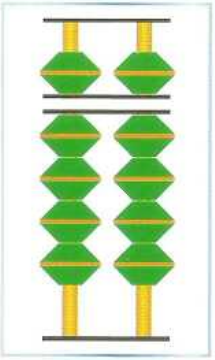
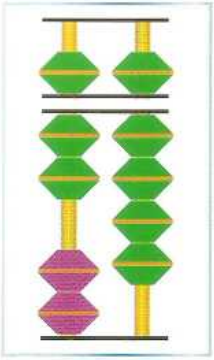
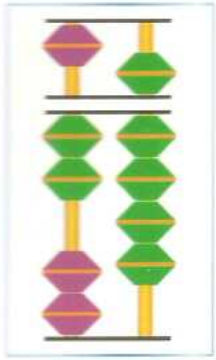
15			18
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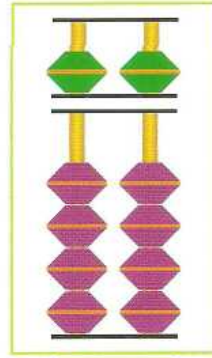
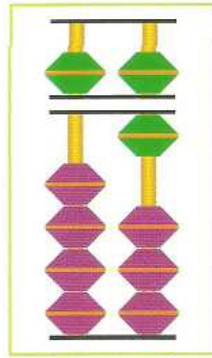
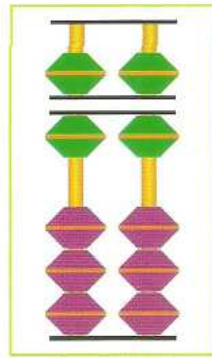
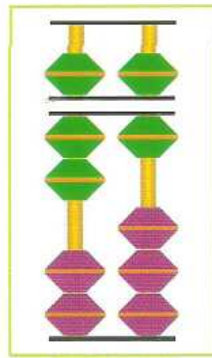
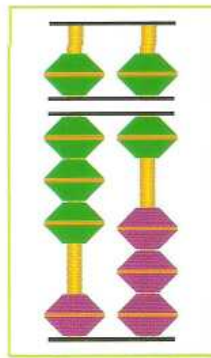
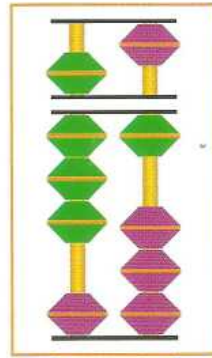
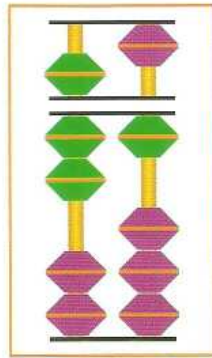
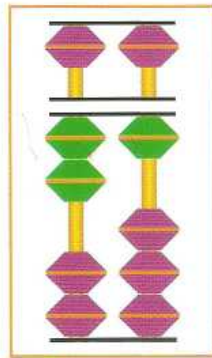
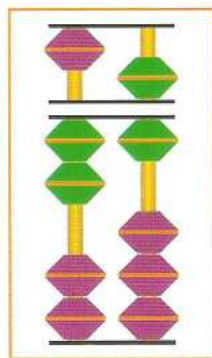
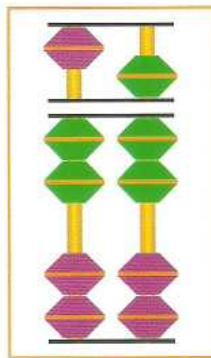
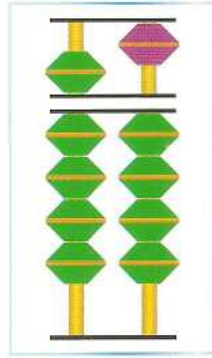
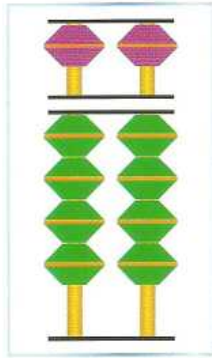
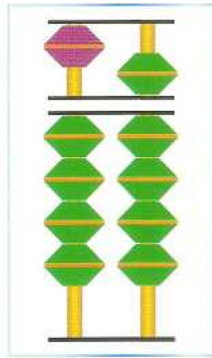
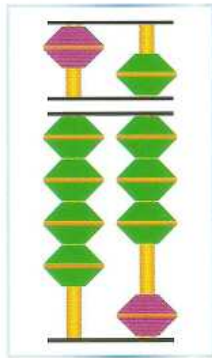
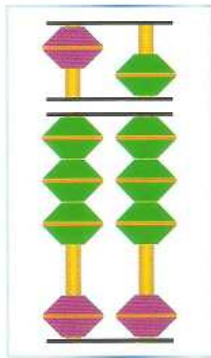
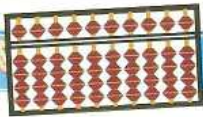
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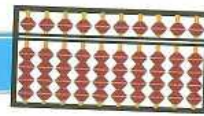




Запишем числа, показанные на Абакусе







Запишем числа, показанные на Абакусе

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	21	14	52	42	57	21	35	17	28	16
<i>b</i>	25	35	12	51	32	68	13	21	51	23
Ответ										

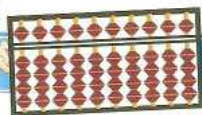
№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	52	81	57	24	16	12	32	18	26	85
<i>b</i>	22	13	42	65	82	17	52	61	21	13
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	34	13	25	43	16	51	61	28	11	21
<i>b</i>	55	15	22	51	32	48	23	21	11	22
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	81	22	43	22	16	21	15	26	17	25
<i>b</i>	11	12	51	15	22	58	14	11	31	23
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	32	17	45	13	16	31	22	68	71	82
<i>b</i>	52	52	52	21	32	13	51	11	11	15
Ответ										





№	1	2	3	4	5	6	7	8	9	10
a	21	34	52	22	17	71	55	27	68	26
b	65	55	12	21	12	18	13	61	11	53
Ответ										

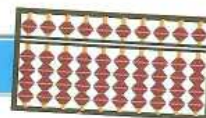
№	1	2	3	4	5	6	7	8	9	10
a	15	51	47	24	26	12	32	18	26	15
b	62	33	52	15	22	17	52	81	51	73
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	64	23	35	13	36	21	11	68	21	21
b	25	65	52	61	52	28	13	21	11	72
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	21	12	63	72	86	13	55	16	27	35
b	51	12	11	15	12	81	44	61	21	53
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	32	17	25	53	66	31	62	68	21	12
b	52	12	22	31	22	13	31	21	51	15
Ответ										





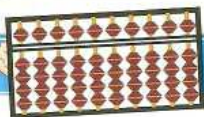
№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	15	21	72	62	25	61	15	56	52	11
<i>b</i>	11	22	12	11	12	12	11	21	21	22
<i>c</i>	11	55	15	25	12	15	12	21	11	56
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	21	62	22	12	33	51	65	16	22	35
<i>b</i>	21	15	51	11	51	15	13	61	51	12
<i>c</i>	51	11	25	11	15	12	11	11	21	51
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	22	21	11	22	16	32	76	26	22	26
<i>b</i>	16	16	13	12	12	12	12	11	22	51
<i>c</i>	11	61	15	55	11	15	11	11	55	11
Ответ										

№	1	2	3	4	5	6	7	8	9	10
<i>a</i>	12	66	12	22	65	21	55	22	15	11
<i>b</i>	11	11	12	11	23	12	12	15	11	22
<i>c</i>	15	11	65	16	11	11	11	11	12	16
Ответ										





№	1	2	3	4	5	6	7	8	9	10
a	15	21	12	62	35	11	25	16	12	21
b	21	22	12	11	12	12	21	11	11	62
c	11	55	15	15	52	15	52	11	11	16
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	61	22	72	22	63	21	35	66	32	15
b	11	65	11	11	11	25	13	11	11	22
c	11	11	15	51	15	52	51	11	51	61
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	72	11	21	12	26	12	26	26	32	16
b	16	76	23	12	22	12	52	11	52	11
c	11	11	55	25	51	15	21	11	15	11
Ответ										

№	1	2	3	4	5	6	7	8	9	10
a	12	26	12	62	75	11	65	12	25	11
b	11	21	12	11	13	12	22	15	21	12
c	15	51	15	16	11	71	11	11	52	26
Ответ										

