## Homework for Lesson № 19

1 Solve the word problems.
A long rain causes 18 mm precipitation every 3 hours. How much precipitation occurs in 2 hours?


In one minute Earth moves about the Sun 2400 km . How far does it move in 7 minutes?


In one minute Earth moves about the Sun 2400 km. How far does it move in 7 seconds?


In one minute Earth moves about the Sun 2400 km . How long does it take to move 360 km?


2 Calculate in your notebook and copy your answers here:
$2568 \div 3=$ $\qquad$ $5715 \div 9=$ $\qquad$ $31 \times 52=$
$(48 \div 12+16)-45 \div 3=$ $\qquad$ $52+23 \times 4 \div 2+2=$ $\qquad$
$54-4 x=18$
$(3 x-3)+8=38$

* $2 x+2=3$
$x=$ $\qquad$ $x=$ $\qquad$

$$
x=
$$

$\qquad$

There are three squares on the drawing.
3 The perimeter of each small square is 16 cm . What is the area of the large square?

4 An origami paper is folded to form 4 smaller squares. What is the area of each smaller squares?
$\qquad$
$\qquad$


5 Find the gray areas:


6 squares placed together without an overlap. What is the area of the studio?


7 Polygonal chain $\mathbf{A B C D E}$ has a perimeter of 59 cm . The segments $\boldsymbol{A B}$ and $\boldsymbol{D E}$ are the same. The segment $\boldsymbol{C D}$ is 3 cm longer than segment $\boldsymbol{B C}$. How long is the segment $\boldsymbol{A E}$ ?


Adding a negative number makes the result smaller (shift to the left). Subtracting a negative number makes the result less negative, i.e. bigger.

8 Calculate:
$4+1=$
$4+(-1)=$
$4-1=$
$4-(-1)=$
$2+3=$
$2+(-3)=$
$2-3=$
$2-(-3)=$
$(-3)+1=$
$(-3)+(-1)=$
$(-3)-1=$
$(-3)-(-1)=$
9 Fill in the numbers missing from the patterns:
7, 9, $\qquad$ $, 15,17, \ldots$
$\longrightarrow$, , , 11, 19, 27, 35, ...
$\qquad$
$\qquad$ $, 10,13,16,19, \ldots$

$$
-2,1,4,7, \longrightarrow, \longrightarrow
$$

$\qquad$
$\qquad$ , 21, 30, 39, 48, ...

$$
-7,-4,-1,2,
$$

$\qquad$ , $\qquad$ , ...

## 10

Complete the drawings :


11 Calculate:
$1: 2=$
$1: 9=$
$1: 8=$
$1: q=$
$1: \frac{1}{2}=$
1: $\frac{1}{9}=$
$1: \frac{1}{8}=$
1: $\frac{1}{q}=$
$\frac{1}{2} \times 2=$
$\frac{1}{9} \times 9=$
$\frac{1}{8} \times 8=$
$\frac{1}{q} \times q=$
$2 \times \frac{1}{2}=$
$9 \times \frac{1}{9}=$
$8 \times \frac{1}{8}=$
$q \times \frac{1}{q}=$

12 Solve the following word problems:
A. One fifth of 60 boxed got damaged. How many boxes remained intact?
1). $\qquad$ number of damaged boxes)
2). $\qquad$ number of intact boxes)
B. One the first day of a trip school students finished one quarter of 32 juice cans. How many cans remained after the first day of the trip?
1). $\qquad$ number of finished juice cans)
2). $\qquad$ number of remaining cans)

For any $\boldsymbol{m}$ the following is TRUE

$$
\begin{array}{ll}
\frac{1}{m} \times m=1 & m \times \frac{1}{m}=1 \\
1: m=\frac{1}{m} & 1: \frac{1}{m}=m
\end{array}
$$

$$
\begin{gathered}
\boldsymbol{a}=m \\
\boldsymbol{S}=\boldsymbol{a} \times \boldsymbol{b}=1 \\
\boldsymbol{b}=\frac{1}{m}
\end{gathered}
$$

These four equalities can be illustrated using a rectangle diagram

For each rectangle write all four equalities that the rectangle illustrates.
$\qquad$
$\qquad$
$\qquad$

14 Solve the equations:


