**Homework for Lesson № 25**

**1** Make all necessary **drawings** and solve the word problems:

**A.** A bakery makes $x$ boxes of cookies and $y$ boxes of cupcakes each day. In each box of cookies there are 20 cookies. There are 6 cupcakes in each box. How many more cookies does the bakery make each day than cupcakes?

_____

_____

**B.** The ticket prices to a zoo are $a$ dollars for adults and $s$ dollars for students. How much will it cost for a group of 100 students, 8 parents, and 12 teachers to attend the zoo?
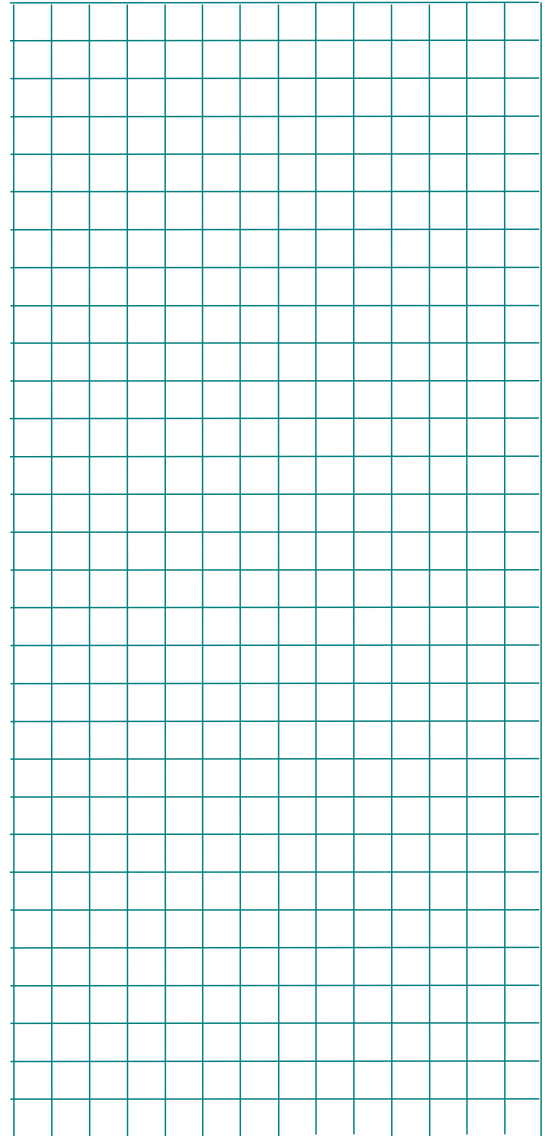
_____

_____

**C.** A school has $300 for a museum trip. A children's ticket costs $5, an adult ticket costs $7. There are 48 students going on the trip. How many teachers can accompany them?

_____

_____

**2** Solve the equations *in your notebook* and copy your answers here:

$x : 5 - 12 = 37$  $\qquad$ $(54 - x) \times 3 = 93$  $\qquad$ $10x - 8x = 4$

$x = $ _____  $\qquad\qquad$ $x = $ _____  $\qquad\qquad$ $x = $ _____

**3** Remove parenthesis:

$3 \cdot (2x - 4) = $ _____  $\qquad\qquad$ $(4w + 16) : 2 = $ _____

**4** Which fractions are marked on the number line?

$$\frac{\square}{5} \qquad \frac{\square}{5} \qquad \frac{\square}{5}$$

0     1     2     3
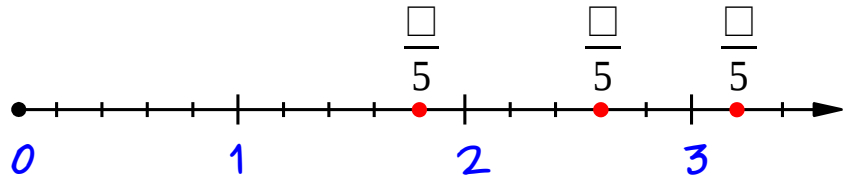
**5** Compare the results of divisions with remainder and into fractions:

$9 : 5 = \dfrac{\square}{\square} = 1\dfrac{\square}{\square}$ $\qquad\qquad$ $9 : 4 = \square$ rem $\square$

$13 : 5 = \dfrac{\square}{\square} = 2\dfrac{\square}{\square}$ $\qquad\qquad$ $13 : 5 = \square$ rem $\square$

$16 : 5 = \dfrac{\square}{\square} = 3\dfrac{\square}{\square}$ $\qquad\qquad$ $16 : 5 = \square$ rem $\square$

**6** Convert improper fractions into mixed numbers:

$\dfrac{13}{4} = \square\dfrac{\square}{\square}$ $\qquad\qquad$ $\dfrac{31}{5} = \square\dfrac{\square}{\square}$ $\qquad\qquad$ $\dfrac{17}{6} = \square\dfrac{\square}{\square}$

$\dfrac{22}{9} = \square\dfrac{\square}{\square}$ $\qquad\qquad$ $\dfrac{16}{3} = \square\dfrac{\square}{\square}$ $\qquad\qquad$ $\dfrac{13}{2} = \square\dfrac{\square}{\square}$

$\dfrac{12}{5} = \square\dfrac{\square}{\square}$ $\qquad\qquad$ $\dfrac{27}{4} = \square\dfrac{\square}{\square}$ $\qquad\qquad$ $\dfrac{8}{7} = \square\dfrac{\square}{\square}$

**7** Replace multiplication by a fraction with two sequential operations with whole numbers:

$20 \times \dfrac{4}{5} = 20 \times \square : \square =$ $\qquad\qquad$ $35 \times \dfrac{4}{7} = 35 : \square \times \square =$

$18 \times \dfrac{4}{3} = 18 \times \square : \square =$ $\qquad\qquad$ $9 \times \dfrac{4}{9} = 9 : \square \times \square =$

**8** Use the sample if needed to calculate:

$1 : \dfrac{1}{4} =$      $3 : \dfrac{1}{5} =$      $5 : \dfrac{1}{3} =$      $7 : \dfrac{1}{3} =$

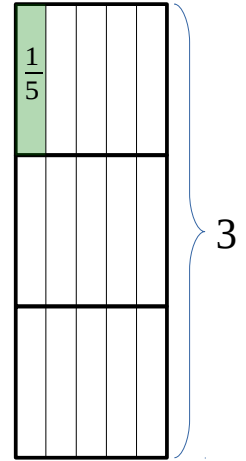$2 : \dfrac{1}{2} =$      $3 : \dfrac{1}{3} =$      $4 : \dfrac{1}{4} =$      $5 : \dfrac{1}{5} =$

$7 : \dfrac{1}{5} =$      $2 : \dfrac{1}{4} =$      $3 : \dfrac{1}{9} =$      $4 : \dfrac{1}{10} =$

$3 : \dfrac{1}{5} = 15$

**9** Solve the equations:

$\dfrac{1}{3}x + 5 = 7$

$\dfrac{1}{3}x =$

$x =$

$x =$

     ✔

$12 - \dfrac{1}{6}x = 8$

$\dfrac{1}{6}x =$

$x =$

$x =$

     ✔

$\dfrac{7}{2}x = 14$

$\dfrac{1}{2}x =$

$x =$

$x =$

     ✔

**10** Points *A*, *B*, and *C* are vertexes of parallelogram *ABCD*. Plot no more than two auxiliary circles to find point *D*; record your algorithm.

> 1. Parallelograms have two pairs of parallel sides.
>
> 2. Their parallel sides are equal.

1. Plot *v* = Circ(    , |*AB*|)

2. Plot *w* = Circ(    ,     )

3. _____

*B*

*C*

*A*

**11** Label each view with the correct shape.

A 

B 

C 

D 

E 

F 

G 

H 

| Top view | Side view | Front view |
| --- | --- | --- |



I 

J 

K 

L 

**12** Draw the top, side and front views for the shape below.
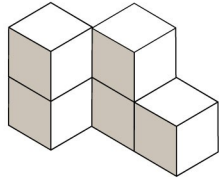


| Top view | | | | Side view | | | | Front view | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
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**13** Draw a shape that has the following top, side and front views.

| Top view | | | | Side view | | | | Front view | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
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| | | | | | | | | | | | |



**14** Draw the top views of the missing kitchenware.