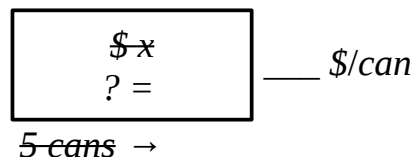


### Homework for Lesson № 21

**1** Make appropriate *drawings* AND write *expressions* to solve the word problems.

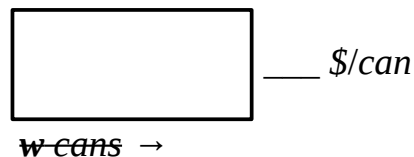
A. 5 cans of juice cost  $x$  dollars. How much do 7 cans cost?

\_\_\_\_\_



B.  $w$  cans of juice cost  $x$  dollars. How much do 7 cans cost?

\_\_\_\_\_



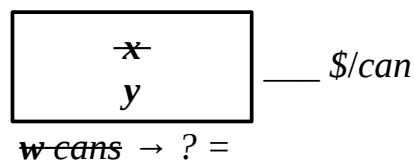
C. 5 cans of juice cost  $x$  dollars. How many cans can FT buy if he has \$60?

\_\_\_\_\_



D.  $w$  cans of juice cost  $x$  dollars. How many cans can FT buy if he has  $y$  dollars?

\_\_\_\_\_



**2** Do **in your notebook** and copy your answers here:

a). Calculate:

$$3321 \div 9 = \underline{\hspace{2cm}} \quad 15 \times 78 = \underline{\hspace{2cm}} \quad 13 \times 49 = \underline{\hspace{2cm}}$$

\_\_\_\_\_

$$80 \div 2 - 3 + 1 = \underline{\hspace{2cm}} \quad 12 \div 3 + 4 - 24 \div 3 \times 8 = \underline{\hspace{2cm}}$$

b). Determine the order of operation in the “left side” expressions **AND** make all necessary **drawings** when solving these equations:

$$12 \times (x - 32) = 96$$

$$3x + 40 = 67$$

$$2500 : (25 - x) = 500$$

$$x = \underline{\hspace{2cm}}$$

$$x = \underline{\hspace{2cm}}$$

$$x = \underline{\hspace{2cm}}$$

3

Write each of these numbers in ancient Egyptian symbols:

2,003,251

200,503

Number	Symbol	Description
1		Vertical stroke
10	∩	Heel bone
100	⊙	Scroll
1000	☉	Lotus flower
10,000	☞	Pointing finger
100,000	🐟	Fish
1,000,000	🧎	Kneeling person

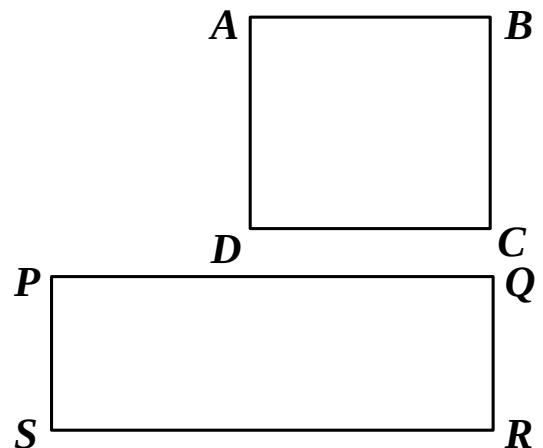
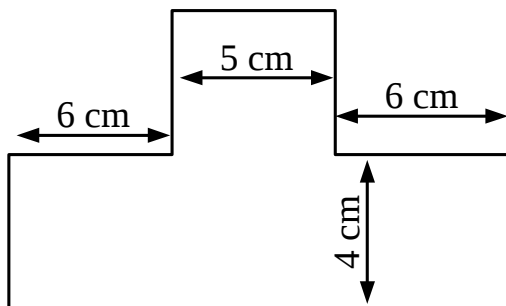
1, 321, 683

8002

4

A. Complete the drawing to find and which rectangle has a larger area and how much larger.

$AB = 12$  cm;  $BC = 9$  cm;  $SR = 14$  cm;  $PS = 7$  cm.

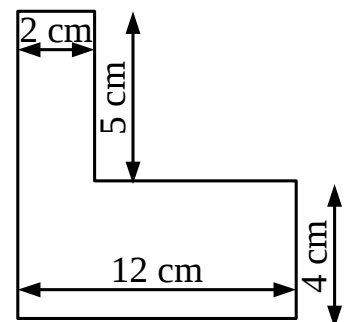


B. The shape on the drawing is made of a rectangle and a square. Find its area.

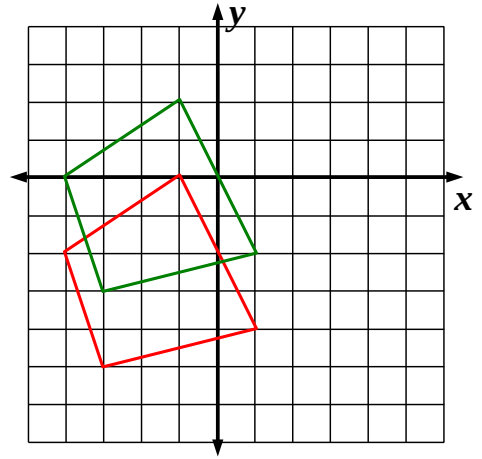
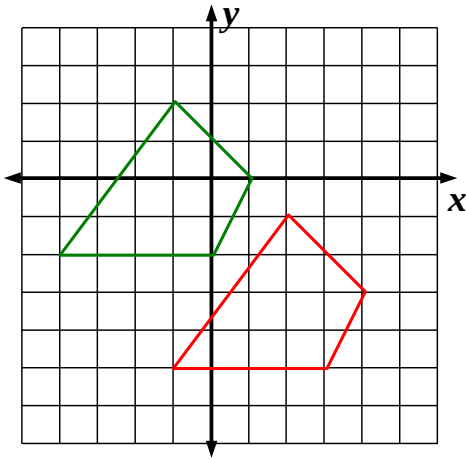
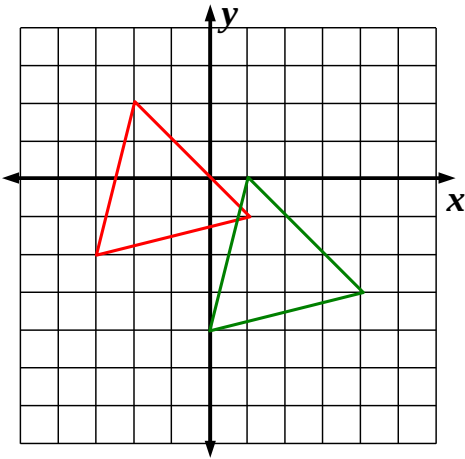
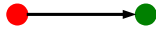
S = \_\_\_\_\_

C. The shape on the drawing is made of two rectangles. Find its area.

S = \_\_\_\_\_



**5** A. Write a rule to describe the motions. Plot appropriate arrow on each drawing.



**B.** Plot the shapes in their new positions after moving according to the descriptions:

$A(-2,3); B(-1, -4); C(1, -1)$

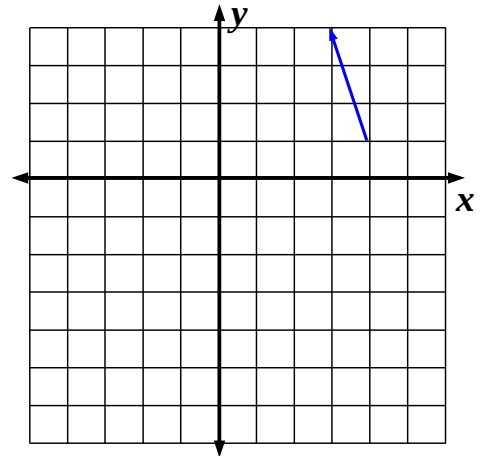
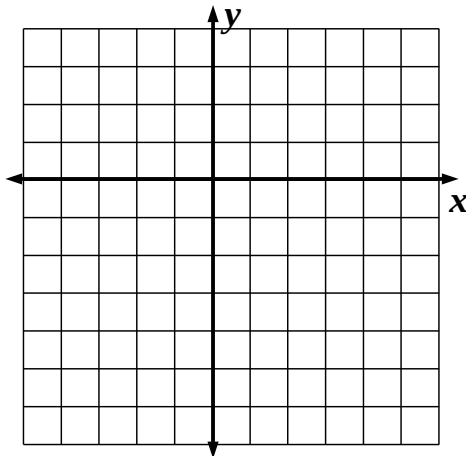
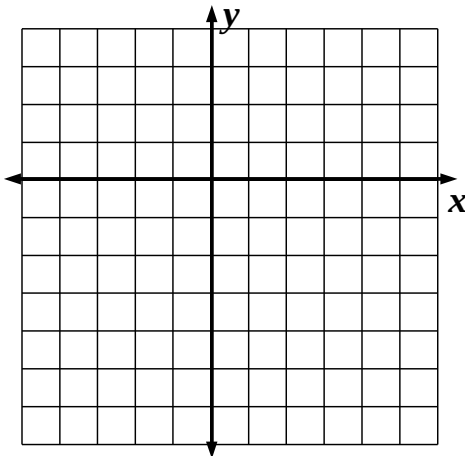
Move: 3 units  $\rightarrow$ , 3 units  $\downarrow$

$A(0,2); B(2, -4); C(0, -2); D(-1,0)$

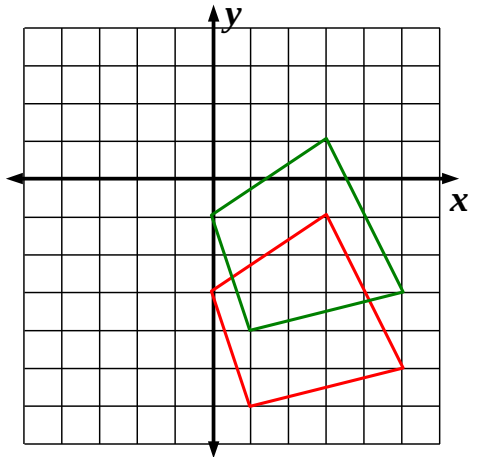
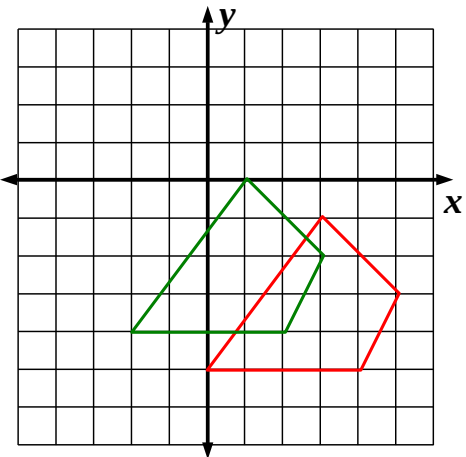
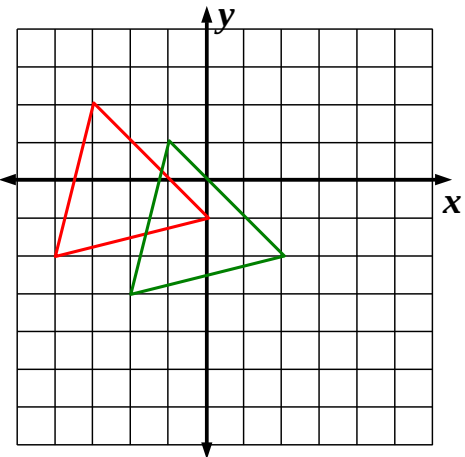
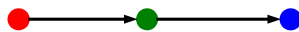
Move: 2 units  $\leftarrow$ , 2 unit  $\uparrow$

$A(0,1); B(3, -3); C(-1, -2)$

Move: see blue arrow



**C.** Analyze the motion of the red shape turning into a green shape. Plot an appropriate arrow. Repeat the same motion to turn the green shape into the third shape (blue).



6

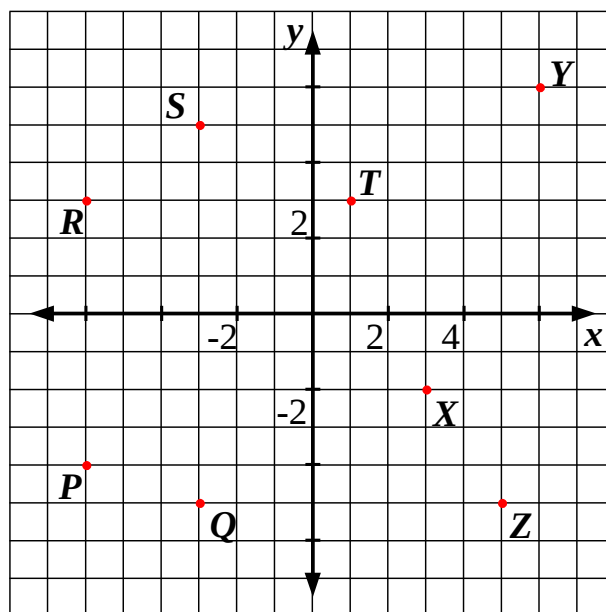
A. Use a green pencil to plot the following points in the provided coordinates:

$$A(1, -1) \quad B(3; 4) \quad C(-1,3)$$

$$D(-6, 1) \quad E(-4, -2) \quad F(-3, 4)$$

$$G(4, -1) \quad H(-5, 3) \quad I(2, -1)$$

B. Label on the drawing write down the coordinates beside the labeled points.



7

Q is a set of numbers. Complete the sentences to make correct statements about these numbers.

$$Q = \{1003, 146, 9, 831, 20, 34, 11\}$$

Some of these numbers \_\_\_\_\_

None of these numbers is \_\_\_\_\_

At least one of these numbers is \_\_\_\_\_

More than one of these numbers is \_\_\_\_\_

At least one of these numbers is not \_\_\_\_\_

8

Do the arithmetics with “magic numbers” that are plotted on the “magic number line”

$\Delta \quad \Theta \quad \Lambda \quad \Sigma \quad \Omega \quad \Pi$

$$\Lambda - (-1) = \quad \quad \quad \Lambda + (-2) = \quad \quad \quad \Sigma + \underline{\quad} = \Delta$$

$$\Pi + \quad = \Lambda \quad \quad \quad \Lambda - \quad = \Pi \quad \quad \quad \Sigma - \Theta =$$

$$\Theta - (-3) = \quad \quad \quad \Pi + \quad = \Sigma \quad \quad \quad \Delta + 4 =$$

**8** Calculate:

$(-1) + 7 =$	$(-1) + (-7) =$	$(-1) - 7 =$	$(-1) - (-7) =$
$1 + 7 =$	$1 + (-7) =$	$1 - 7 =$	$1 - (-7) =$
$(-5) + 3 =$	$(-5) + (-3) =$	$(-5) - 3 =$	$(-5) - (-3) =$
$5 + 3 =$	$5 + (-3) =$	$5 - 3 =$	$5 - (-3) =$

**9** Solve the puzzles:

<b>3</b>	×		×	<b>4</b>	=	<b>84</b>
×		×		×		
	×		×		=	<b>45</b>
×		×		×		
<b>6</b>	×		×	<b>2</b>	=	<b>96</b>
<b>90</b>		<b>56</b>		<b>72</b>		

	×	<b>1</b>	×		=	<b>56</b>
×		×		×		
<b>2</b>	×		×	<b>4</b>	=	<b>72</b>
×		×		×		
<b>6</b>	×	<b>5</b>	×	<b>2</b>	=	<b>90</b>
<b>96</b>		<b>45</b>		<b>84</b>		

**10** Solve the equations and check your answers. Use rectangles for help.

$2$	:	$y$	=	$\frac{1}{8}$	
$y$	=				
$y$	=				
<span style="color: red;">✓</span>					

$x$	×	$\frac{1}{7}$	=	$3$	
$x$	=				
$x$	=				
<span style="color: red;">✓</span>					

$w$	:	$\frac{1}{3}$	=	$30$	
$w$	=				
$w$	=				
<span style="color: red;">✓</span>					

**11** Calculate:

$$\frac{1}{3} : \frac{1}{2} = \frac{1}{3} \times \square =$$

$$\frac{1}{4} : \frac{1}{3} = \frac{1}{4} \times \square =$$

$$\frac{1}{8} : \frac{1}{3} = \frac{1}{8} \times \square =$$

$$\frac{1}{2} : \frac{1}{5} = \frac{1}{2} \times \square =$$

$$\frac{1}{6} : \frac{1}{7} = \frac{1}{6} \times \square =$$

$$\frac{1}{7} : \frac{1}{9} = \frac{1}{7} \times \square =$$

$$\frac{1}{11} : \frac{1}{4} =$$

$$\frac{1}{4} : \frac{1}{5} =$$

$$\frac{1}{6} : \frac{1}{5} =$$

$$\frac{1}{8} : \frac{1}{5} =$$

$$\frac{1}{3} : \frac{1}{7} =$$

$$\frac{1}{12} : \frac{1}{5} =$$

$$\frac{1}{11} : \frac{1}{6} =$$

$$\frac{1}{2} : \frac{1}{9} =$$

$$1 - \frac{1}{2} =$$

$$1 - \frac{1}{3} =$$

$$1 - \frac{1}{4} =$$

$$2 - \frac{1}{2} =$$

**12** Solve the word problems:

**A.** Foxy tail took 2 kg of cheese from the cheese factory. He decided to package this cheese into bags by putting  $\frac{1}{4}$  kg of cheese into each bag. How many bags does he need to package the cheese?

---

**B.** Greedy Rat found one of the  $\frac{1}{4}$  kg bags of cheese left by foxy tail and ate half of the cheese from this bag. How much cheese did he eat?

---

**C.** Three quarters of the 2 kg of cheese taken by Foxy tail went bad. How much cheese remained well?

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