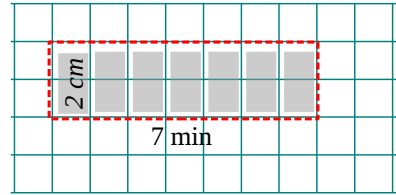


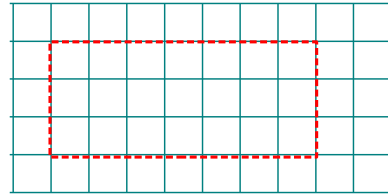
Homework for Lesson № 8

1 Write expressions to solve the word problems and evaluate them where possible:

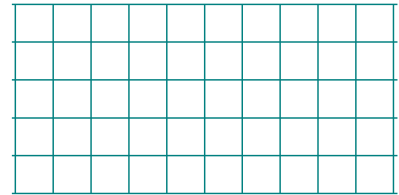
A snail crawls 2 cm every minute. How far will it crawl in 7 min?



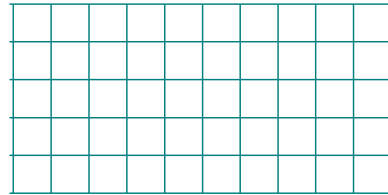
A snail crawls v cm every minute. How far will it crawl in 12 min?



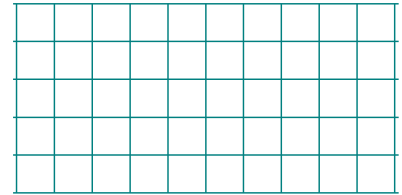
A snail crawls v cm every minute. How far will it crawl in t min?



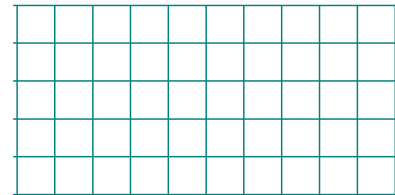
A snail crawls 3 cm every minute. How long will it take to crawl 21 cm?



A snail crawls 3 cm every minute. How long will it take to crawl d cm?

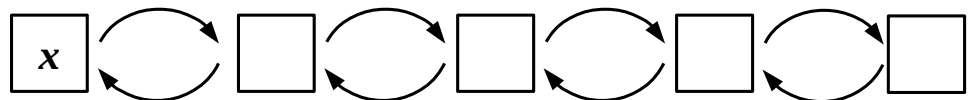


A snail crawls v cm every minute. How long will it take to crawl d cm?



2 Analyze the operations and undo them to solve the equation:

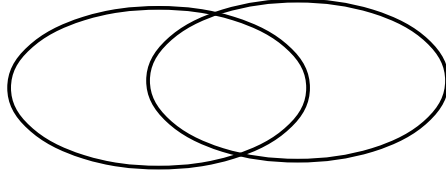
x	\times	5	:	3	:	2	=	5
x	=							
x	=							



3 Place altogether 4 elements (dots) in the two sets on each Venn Diagram to yield

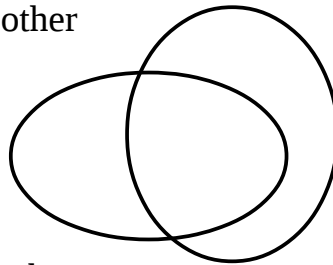
...

a). ... 3 elements in each set

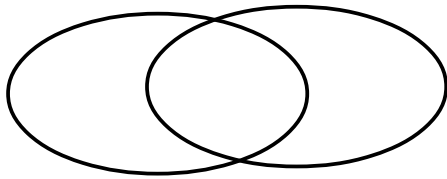


Make sure, there are exactly 4 dots in each Venn Diagram!

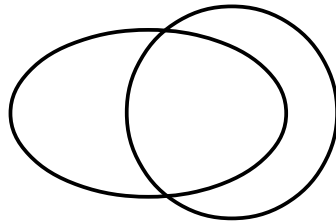
b). ... 2 elements in one set and 3 in the other



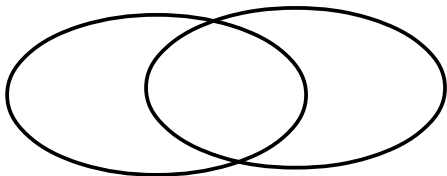
c). ... 4 elements in one set and 3 in the other



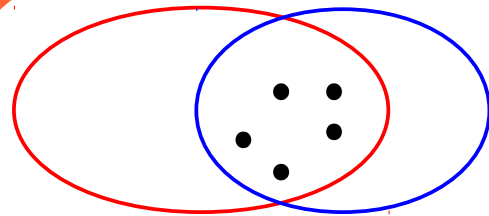
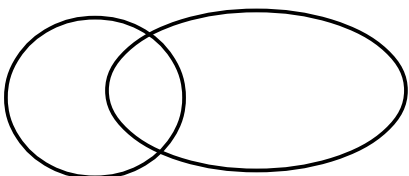
d). ... 0 elements in one set and 4 in the other



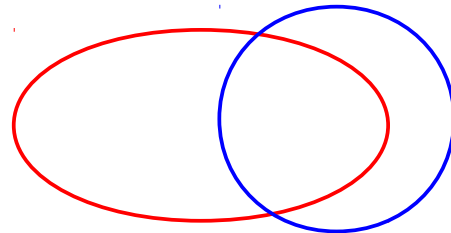
e). ... 4 elements in each set



f). ... 2 elements in each set



Here only 5 elements yield 5 elements in each set.



Can you redistribute these 5 elements to make 4 in one set and 5 in the other?

4 Fill in the tables

x	123	625		419		236	76
y	99		167	192	374		287
$x + y$		702	298		429	509	

x	234	625		419		236	276
y	99		167	192	374		109
$x - y$		223	298		429	83	

x	56	36	63		72	42	35
y	8		7	4			7
$x : y$		4		7	9	6	

x	7		9	4			6
y		5		8	3	6	
$x \times y$	56	25	63		27	18	42

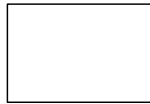
5 Use rectangle diagrams to solve the following equations for x

$$w \times x = 24$$



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

$$g : x = m$$



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

$$32 = x \cdot 8$$



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

$$x : y = z$$



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

6 Compare:

$$a \cdot 3 - a \times 2 \square a \times 2$$

$$w - (5 + 10) \square w - 5 - 10$$

$$q \div 10 \square q \div 20$$

$$m \cdot 5 + m \times 2 \square m \times 7$$

$$b - (3 + 8) \square b - 3 + 8$$

$$a \cdot 1 \square a \times 0$$

7 In your notebook mark the order of operations and write the programs to calculate the expressions below:

a). $q - 12 \times z + 6$

b). $q - 12 \times (z + 6)$

c). $(q - 12) \times (z + 6)$

8 In your notebook use rectangle diagram to solve the following equations. Copy your answers here.

$y \cdot 8 = 64$

$z : 9 = 4$

$7 \times x = 56$

$54 : w = 6$

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

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

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

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

9 Set $M = \{a, \square\}$, set $K = \{m, 4\}$, set $D = \{a, m, \square, \star\}$

Draw a Venn Diagram for these sets.

Use your diagram to complete the TRUE statements using symbols \subset and $\not\subset$:

$M \dots D$

$K \dots D$



10 Fill in one of the symbols \in , \notin , \subset , $\not\subset$ according to the drawing.

$P \dots QR$

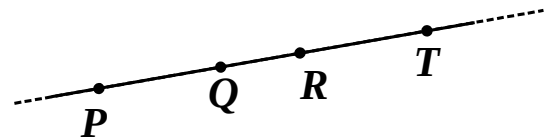
$P \dots [QR]$

$P \dots [QR)$

$[RT] \dots PR$

$Q \dots [TR)$

$[RQ] \dots RT$



$[QR) \dots QR$

$[RQ) \dots PT$

$[QR) \dots [RQ)$

11 Check \checkmark the TRUE statements; cross mark \times the FALSE statements.

$x \in A \cap B$

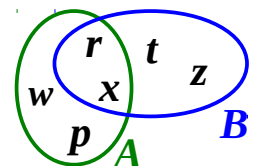
$r \notin A \cap B$

$z \in A \cap B$

$\{r, t\} = A \cap B$

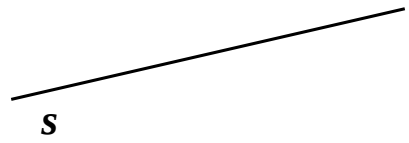
$A \cap B \subset A$

$A \cap B \subset B$



12 a). Mark a point on straight line *s*.

How many rays do you see? _____



Mark 2 points on line *q*.

How many rays do you see? _____



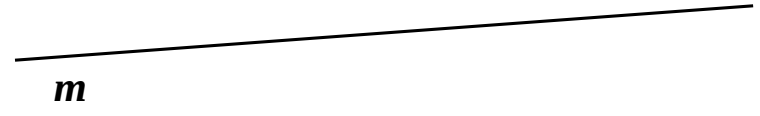
Mark 3 points on line *w*.

How many rays do you see? _____



Mark 4 points on line *m*.

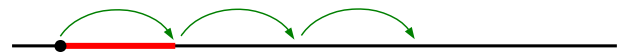
How many rays do you see? _____



13 Fill in the table

# of points marked	1	2	3	4	10	x
# of rays produced						

14 A raft evenly drifts downstream. It moved 42 km in 6 hours. How far did it move in 5 hours?



1. _____

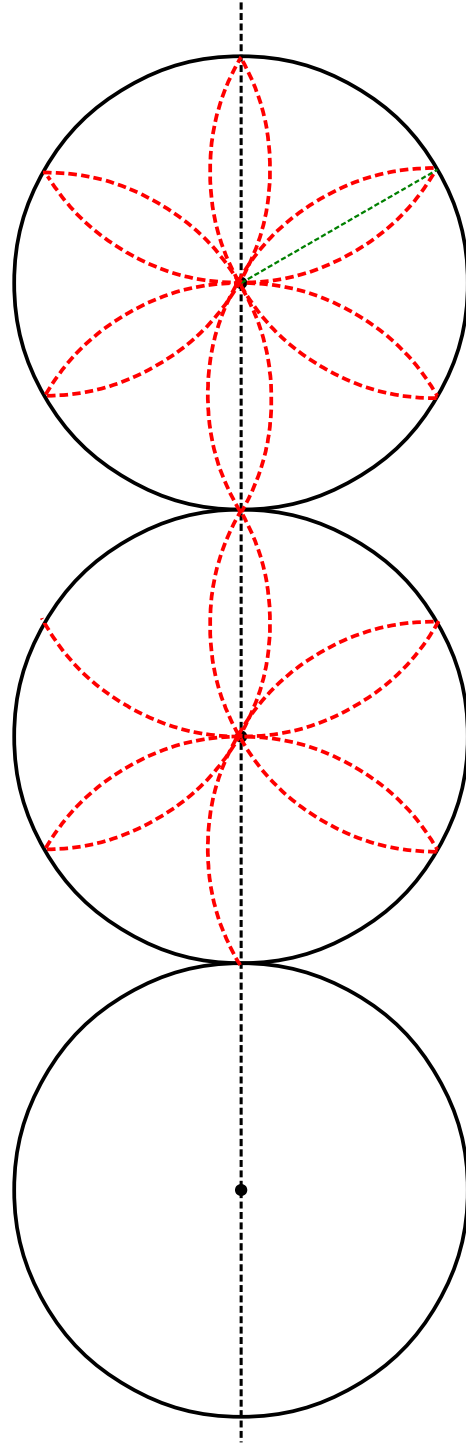
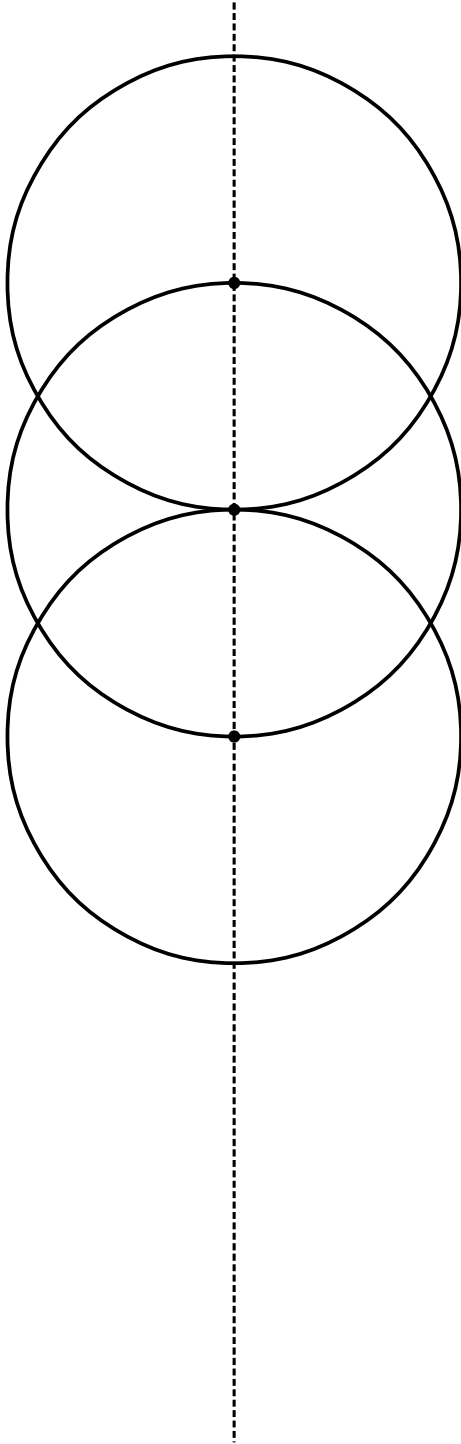
2. _____

A fast train moves 28 km in seven minutes. How long does it take to move 36 km?

1. _____

2. _____

15 Use a compass to continue the patterns:



16 Cat Island, where the brothers are stuck, has 6 towns: **A**, **B**, **C**, **D**, **E**, and **F**.

Every town is connected to the two adjacent towns by roads. Say, town **A** is connected to towns **B** and **F**.

Also there are roads directly connecting towns **A** and **D**, and towns **B** and **F**.

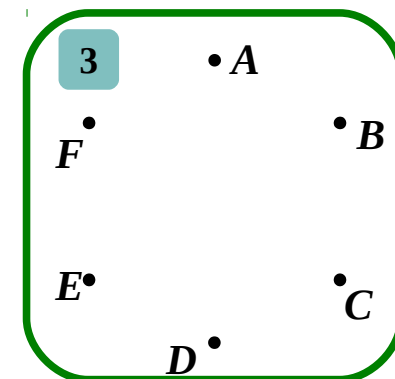
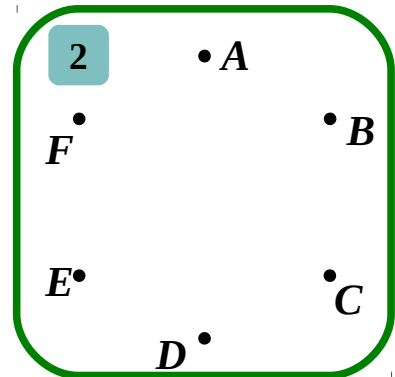
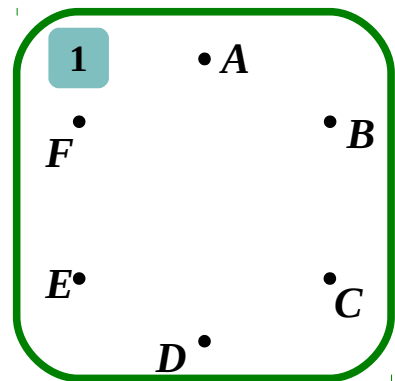
Plot these roads on the graph 1.

Orange cats use bus #1 that begins and ends at the town **A** and skips only towns **E** and **F**.

Plot the route of the bus #1 on the graph 2.

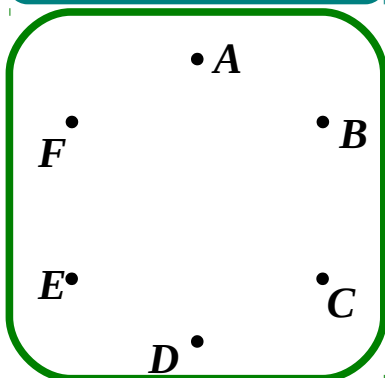
Purple cats use bus #2 that begins and ends at the town **C** and skips only town **A**.

Plot the route of the bus #2 on the graph 3.

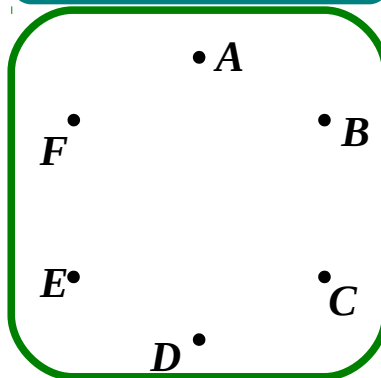


Complete the graphs below:

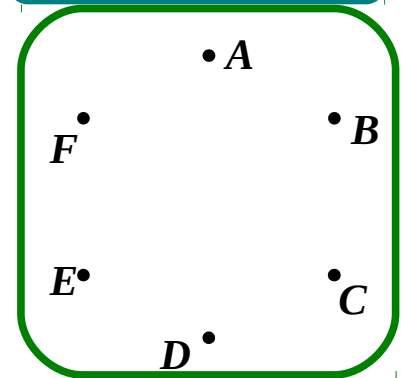
Roads that both orange and purple cats use.



Roads that either orange or purple cats use.



Roads that orange cats do not use.



17

A bug is sitting on an invisible face. Color this face yellow.

