

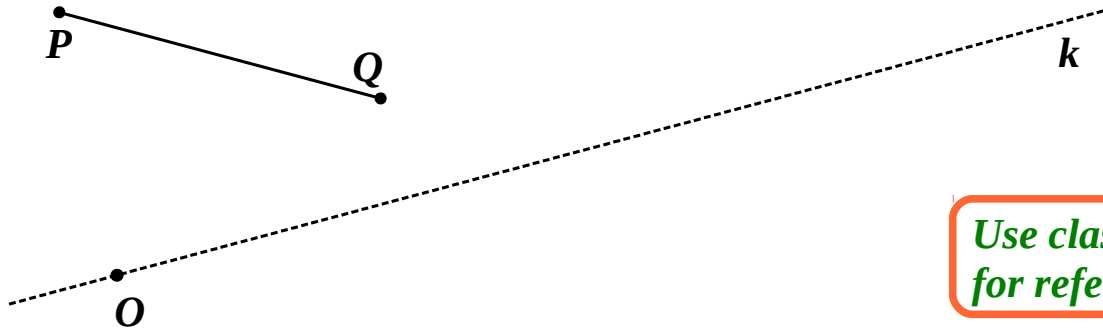
3 k is a straight line. Point $O \in k$.

A. Use a compass to find point A such that:

1. $A \in k$

and

2. $|OA| = |PQ|$



*Use classwork
for reference!*

Record your algorithm BOTH in plain English AND in symbolic form.

Writing Program Steps		
	Plain English Writing	Symbolic Writing
1.	Plot _____ _____ _____	Plot _____
2.	Find _____ _____ _____	Find D : _____ _____

B. Use a compass to find point B such that:

1. $B \in k$

and

2. $|AB| = |PQ|$

Record your algorithm either in plain English OR in symbolic form.

1. _____

2. _____

Explain your choice of English vs symbolic writing: _____

4 In your notebook, solve the following equations. Make drawings if you need to. Check your answers and copy them over below.

$$519 - x = 67$$

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

$$y + 209 = 304$$

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

$$z - 25 = 76$$

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

$$p : 5 = 7$$

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

$$q \times 7 = 42$$

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

$$72 : w = 9$$

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

5 Arthur went to the store 4 times last month. He buys 5 bottles of apple juice each time he goes to the store. How many bottles of apple juice did Arthur buy last month?

There are 8 pencils in each box. How many pencils are in 9 boxes?

There are 20 liters of honey in 3 jars in total. How many liters will be in one jar if we distribute all that honey evenly among 10 jars?

We need 120 logs to build 2 houses. How many logs do we need to build 6 houses?

Evelyn went to the store 8 times last month. She buys 11 stickers each time she goes to the store. How many stickers did Evelyn buy last month?

Label the order of operations and calculate:

6

$$7 + (8 + 9) - 3 = \underline{\hspace{2cm}}$$

$$9 - (2 + 7) = \underline{\hspace{2cm}}$$

$$(2 + 9) + 9 \times 6 = \underline{\hspace{2cm}}$$

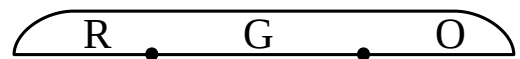
$$9 \times 3 - (6 - 4 + 5) = \underline{\hspace{2cm}}$$

$$(1 + 9) - (6 + 2 \times 6) = \underline{\hspace{2cm}}$$

$$(5 + 1) \times (3 - 2 + 4) = \underline{\hspace{2cm}}$$

7

There are several marbles in a bag including x red marbles. There are 3 times more green marbles than the red ones. The number of orange marbles is y less than the number of green ones.

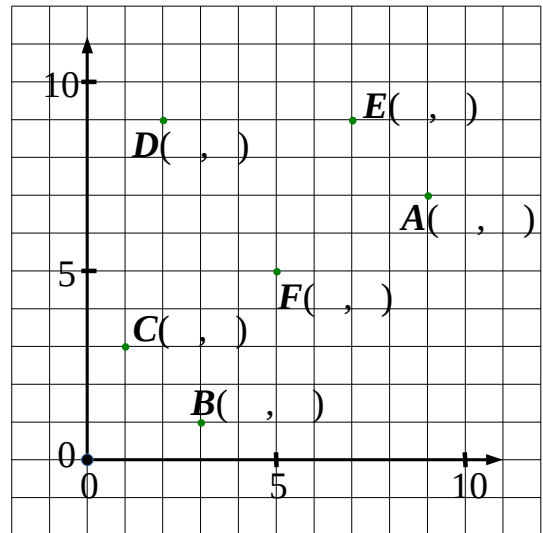


Complete the drawing and use it to explain the meanings of the following expressions:

Beware of nonsense!

$x \times 3$	
$x : 3$	
$x \times 3 - y$	
$x \times 3 - x$	
$x \times 3 + x$	
$x \times y$	
$(x \times 3) \times (x \times 3 - y)$	
$x \times 3 + x + x \times 3 - y$	

8 Write the coordinates of the points **B, C, D, E, F**.



Plot the following points on the graph:

W(2, 7)

X(9, 2)

Y(3, 11)

Z(8, 3)

9 Fill in the blanks with symbols $\in, \notin, \subset, \not\subset$, according to the drawing:

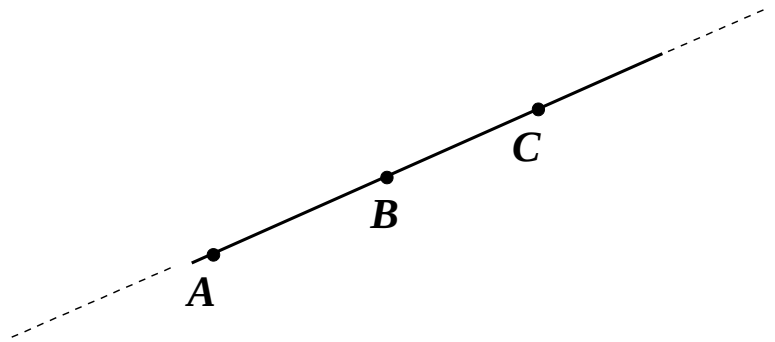
[AB] ... AB [AC] ... BC

A ... [BC] A ... BC

[AB) ... BC [AB) ... [BC)

C ... [AB) C ... [BA)

[AC] ... [CA) [AC] ... [CA)



10 Look at a Venn Diagram for sets **A, B**, and **C**. Check \checkmark the TRUE statements; cross \times the FALSE statements.

$B \subset A$

$B \in A$

$m \in C$

$a \subset B$

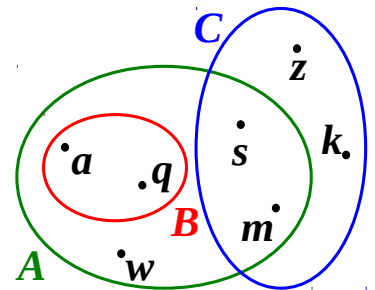
$a \in B$

$a \in A$

$s \subset C$

$m \in A \cap C$

$q \in A \cap B$



11

Once Jake the Mouse obtained a shovel, the brothers began to dig their mice holes. Since there is only one shovel, they need to take turns digging.

Complete four graphs illustrating some possible ways the brothers may take turns digging.

JM .LJ

JM .LJ

JM .LJ

JM .LJ

PY .FT

PY .FT

PY .FT

PY .FT

1. _____
2. _____
3. _____
4. _____

1. _____
2. _____
3. _____
4. _____

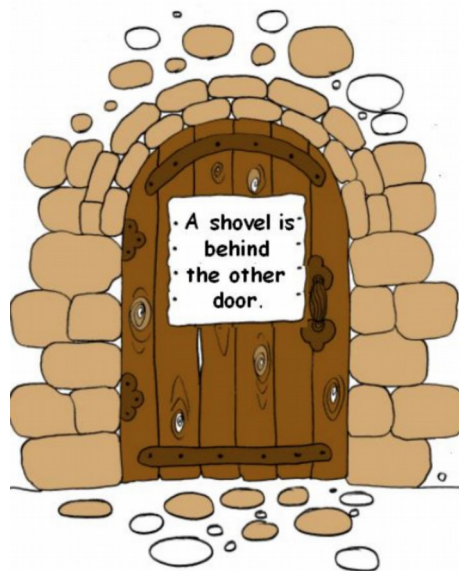
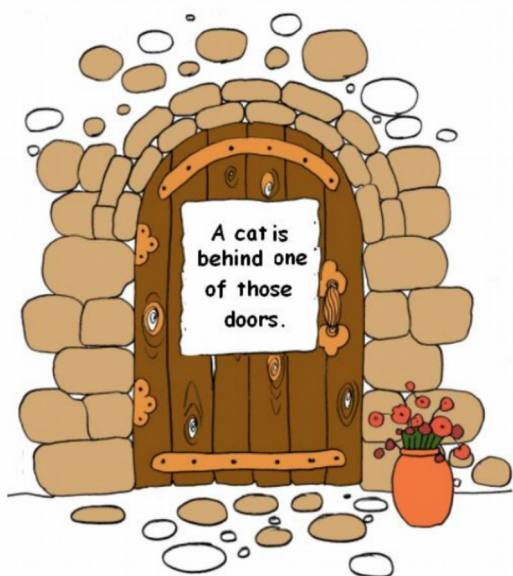
1. _____
2. _____
3. _____
4. _____

1. _____
2. _____
3. _____
4. _____

Are there other possible ways to take turns digging? _____

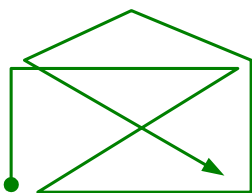
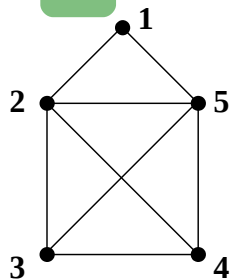
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There is a cat behind one door and a shovel behind another. The labels are ***EITHER both truth OR both false.*** Find the shovel!



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Describing your Rout.



3-2-5-3-4-5-1-2-4

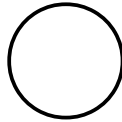
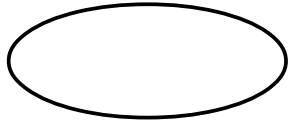
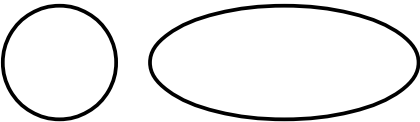
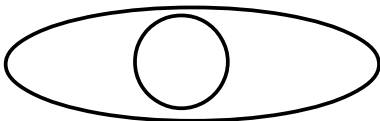
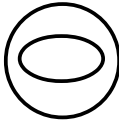
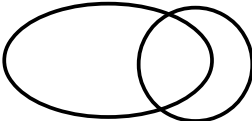
Walking a graph is described by listing the nodes in the order of visiting them.

Each time you visit a node you list it again.

- Walk every edge of each graph without walking any edge twice.
- Describe you rout by listing the nodes in the visiting order.
- Walk the first two graphs in two different ways


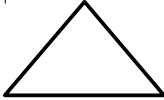
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Complete the table by filling in the names of appropriate sets. If there is more than one correct answer, pick any.

	SETS	
		
		- two digit numbers
	- textbooks	
		- vowels
	- forest animals	

15

Complete the table by drawing a Venn Diagram for each pair of sets.

	SETS	
		
	- words	- nouns
	- even numbers	- numbers
	- flying animals	- birds
	- cookies	- cars