# 7TH Grade Math EXIT TEST – Part 2

**WORD PROBLEMS**

Subtraction Word Problems

1. A museum had 710 paintings. After they got rid of some, they had 488 left. How many paintings did they get rid of? _____ - _____ = _____

2. A store had 800 sodas. After a sale they had 365 left. How many did they sell?

   _____ - _____ = _____

Addition Word Problems

1. Oliver bought some cupcakes for a party. During the party 900 were eaten. Now he has 175. How many cupcakes did Oliver get for the party? _____ + _____ = _____

2. At a bus stop 108 people got off the bus. Now there were 15 people on the bus. How many people were on the bus before? _____ + _____ = _____

Multiplication Word Problems

1. There are 8 birds perched on the branches of a tree. How many feet are there on the branches? _____ x _____ = _____

2. There are 9 butterflies in a cage. Each butterfly has 6 **black** dots and 5 **yellow** dots. How many **black** dots are there in all? _____ x _____ = _____

Division Word Problems

1. Mia had 40 pencils. She divided them into groups of 4. How many groups did she put them into? What division fact helped you know this? _____ ÷ _____ = _____

2. The Pancake Restaurant served 32 pancakes. If 8 customers ate an equal number of pancakes, how many did each person eat? _____ ÷ _____ = _____

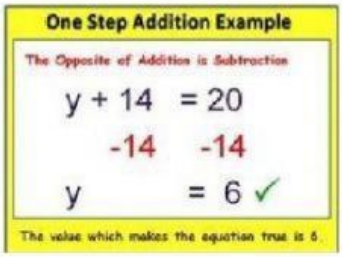
Word Problems Using Percentages: (Must include dollar signs and other measurements)

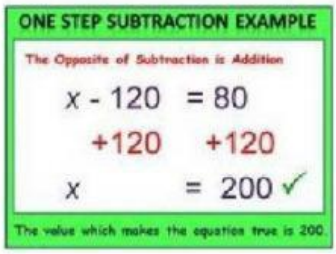
1. Decrease $500 by 30% _____
2. Increase 4 km by 28% _____
3. Simon bought a radio for $420 and sold it for a 12% profit.
   How much did he sell it for? _____

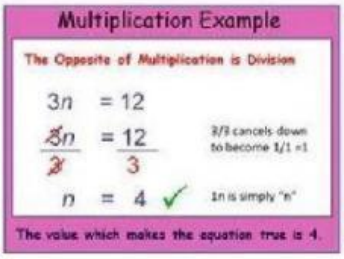
LIVEWORKSHEETS

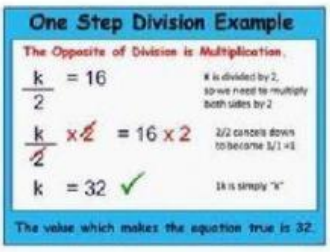
# EXPRESSION & EQUATIONS

## One Step Equations




1. $a + 4 = 10$

   a = ____

2. $f - 7 = 13$

   f = ____

3. $5j = 25$

   j = ____

4. $\frac{p}{2} = 4$

   p = ____

## Simplifying Addition & Subtraction Expressions

1. 10k – 6k = _____
2. 7b – 3b = _____
3. 5c + 4c = _____
4. 9f + 2f = _____

## Simplifying Multiplication & Division Expressions

1. 2x + 4 Let x = 8 _____

2. 7n + 2r - 9 Let n = 3 and r = -3 _____

## Multi-Step Equations

**distribute** - clear parentheses

**combine like terms** - either side of the equation should only have "unlike" terms

**isolate the variable term** - add or subtract the constant term

$$11x + 4 = 48$$
$$-4 \quad -4$$
$$\frac{11x}{11} = \frac{44}{11}$$
$$x = 4$$

$$11(4) + 4 = 48$$
$$44 + 4 = 48$$
$$48 = 48 \checkmark$$

1. 5g + 2 – g = 22
   5g – 1g = ___ g
   ___ g + 2 = 22
   4 x ____ = 20
   ____ + 2 = 22
   g = _____

2. 6y + 4 – 3y = 13
   6y – 3y = ___y
   3y + 4 = 13
   3 x 3 = ____
   9 + ____ = 13
   y = ____

LIVEWORKSHEETS

Inverse Operations

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| since | 1 | + | 3 | = | 4 | since | 9 | + | 2 | = | 11 |
| then | 4 | - | 1 | = | ☐ | then | 11 | - | 9 | = | ☐ |
| since | 3 | + | 5 | = | 8 | since | 2 | + | 3 | = | 5 |
| then | 8 | - | 3 | = | ☐ | then | 5 | - | 2 | = | ☐ |
| since | 7 | + | 7 | = | 14 | since | 3 | + | 9 | = | 12 |
| then | 14 | - | 7 | = | ☐ | then | 12 | - | 3 | = | ☐ |

**GRAPHING & LINEAR EQUATIONS**

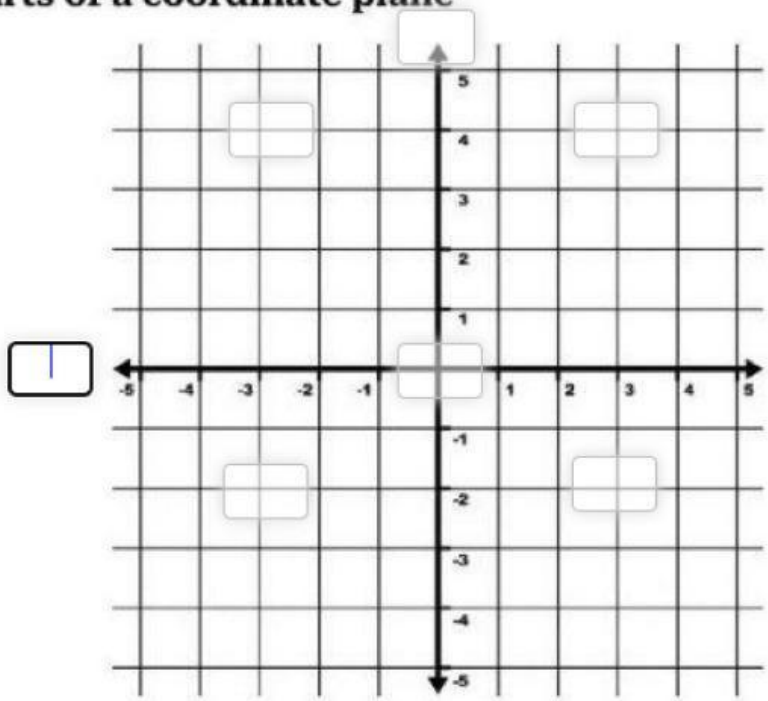
Cartesian Coordinate System (Coordinate Plane)

**Hint: Label each section with the correct X, Y axis, or the number I, II, III, IV**

**Parts of a coordinate plane**

**Label the:**

1. X-axis
2. Y-axis
3. Origin
4. Quadrant I
5. Quadrant II
6. Quadrant III
7. Quadrant IV



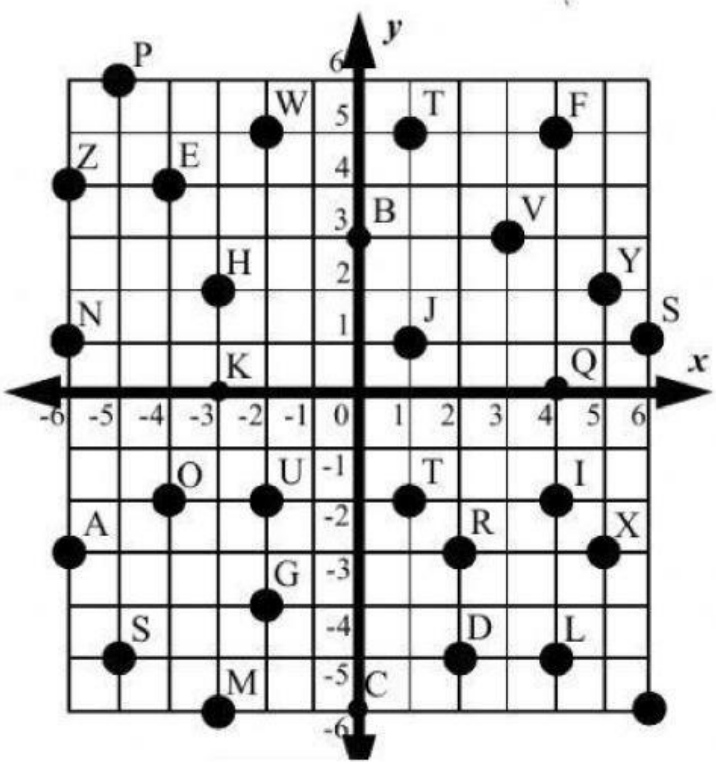

LIVEWORKSHEETS

## Plotting Points

**Hint:** Axis **X** is the 1st coordinate and Axis **Y** is the 2nd coordinate.

Answers must be written in this format: (2, -4) or (1, 5)

Give the co-ordinates for the points on the number plane below.




1 Point A _____

2 Point B _____

3 Point C _____

4 Point D _____

5 Point E _____

6 Point F _____

## Linear Equations

1. X + 5 = 12

   X = ____ - _____

   X = _____

2. Y – 3 = 15

   Y = ____ + _____

   Y = ___

3. 6 + H = 9

   H =____ -____

   H = ____

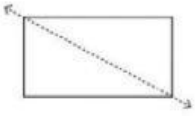
## LINES AND TRIANGLES

### Lines of Symmetry

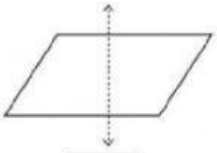
Is the dotted line on each shape a line of symmetry? Write yes or no.

1)

2)



3)



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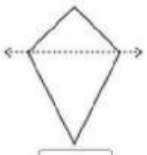


LIVEWORKSHEETS

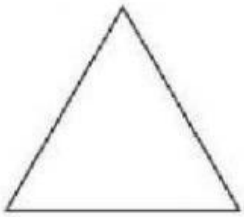
## Rotational Symmetry

***Find the order of rotational symmetry in the following shapes:***

1.

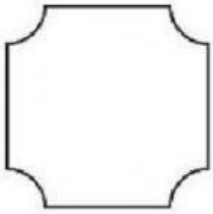
a) 4
b) 5
c) 2
d) 3

2.



a) 1
b) 4
c) 3
d) 2

3.

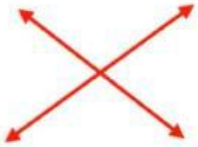


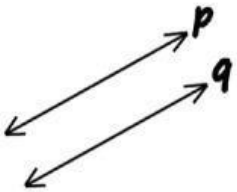
a) 3
b) 2
c) 5
d) 4

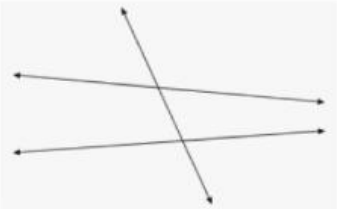
## Parallel Lines

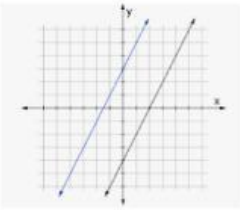
***Write Yes if the diagrams below show parallel lines or No if they do not***

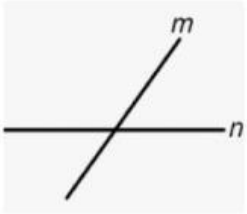
- Parallel lines do not meet.
- The distance between parallel lines is always the same.





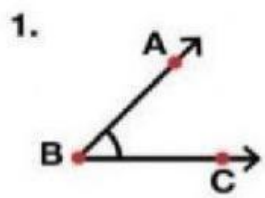


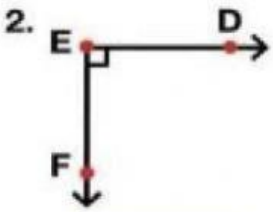


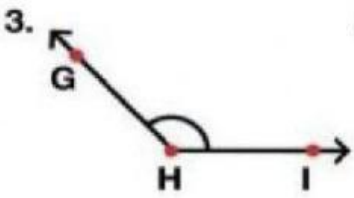

_____ _____ _____ _____ _____

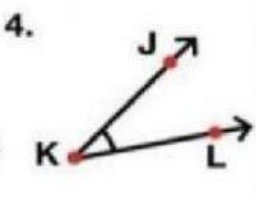
## Types of Angles

**Label each angle as acute, obtuse, or right.**

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