

When **multiplying only** OR **dividing only**

Class: \_\_\_\_\_

- **SAME signs** give a \_\_\_\_\_ answer

$(+4)(+8) = \underline{\quad}$	$(-3)(-5) = \underline{\quad}$
$\frac{(+40)}{(+5)} = \underline{\quad}$	$\frac{-42}{-7} = \underline{\quad}$

- **DIFFERENT signs** give a \_\_\_\_\_ answer.

$(-4)(+8) = \underline{\quad}$	$(-3)(5) = \underline{\quad}$
$\frac{(-40)}{(+5)} = \underline{\quad}$	$\frac{-42}{+7} = \underline{\quad}$

- An **EVEN number of Negative Integers multiplied together** give a \_\_\_\_\_ answer.

- An **ODD number of Negative Integers multiplied together** give a \_\_\_\_\_ answer.

- GIVEN:  $(-35) \div (+7) = (-5)$ . Identify:

A) DIVISOR \_\_\_\_\_


B) DIVIDEND \_\_\_\_\_

C) QUOTIENT \_\_\_\_\_

- **Addition statement written as a multiplication statement:**

$$(-4)+(-4)+(-4)+(-4)+(-4) = \underline{\hspace{2cm}}$$

## Properties of Integers

Example	Property
$(-4) \times 0 = 0$	
$(-6)(+3) = (+3)(-6)$	
$(-19) \times 1 = (-19)$	
 $(-2)[(+3) + (-4)] = (+2)(+3) + (+2)(-4)$	

1. Evaluate:

A) $(-6)^2 =$ _____	B) $(-5)(-7) =$ _____	C) $(+4)(-9) =$ _____	D) $(+2)(-7) =$ _____
E) $(+6)(+8) =$ _____	F) $\frac{-72}{-9} =$ _____	G) $\frac{+120}{+10} =$ _____	H) $\frac{0}{-9} =$ _____
I) $\frac{+54}{-6} =$ _____	J) $\frac{-54}{+8} =$ _____	K) $(-3)(+5)(-2) =$ _____	L) $(-4)(-5)(-3) =$ _____
M) $(-64) \div (+8) \div (-4) =$ _____			

2. The product of two integers is 16. The sum of the same integers is  $-10$ . What are the integers?

3. The temperature gets colder by an average of  $10^{\circ}\text{C}$  every two hours. What is the change in temperature which occurs after 8 hours is:

4. George lost \$120 over 6 days on the stock market. What is the daily decrease in price?

5. A submarine dives at a rate of 20 meters per minutes for 10 minutes. What is the distance the submarine travels?

6. Model using either TILES or NUMBER LINE each of the following: Explain your answer.

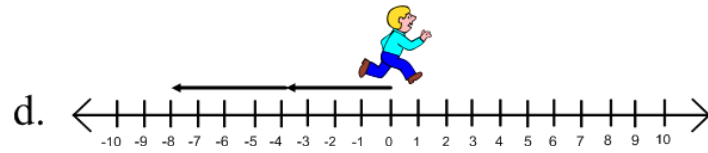
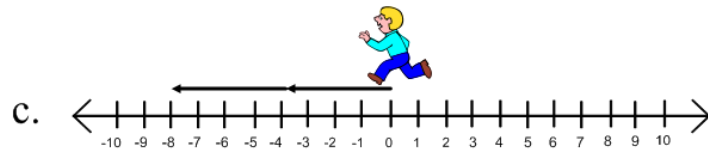
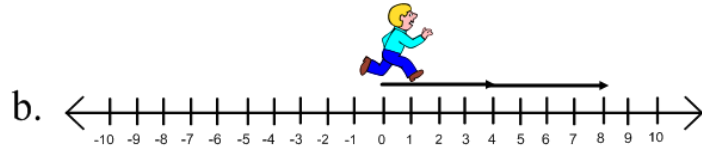
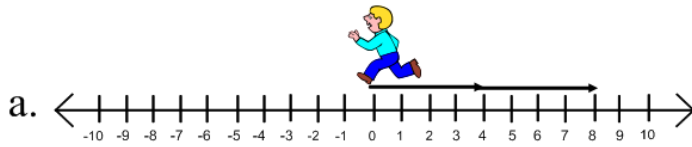
A)  $(+4)(-7)$

C)  $(-3)(+4)$

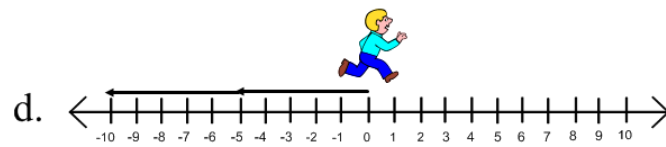
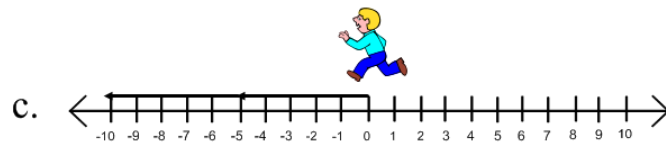
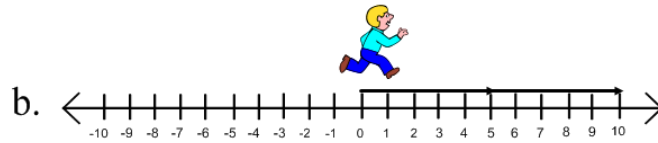
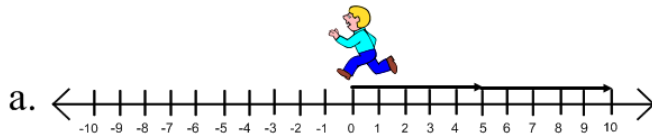
B)  $(+3)(+6)$

D)  $(-2)(-3)$

7. Identify the multiplication of integers shown below.



8. Identify the division of integers shown by each number line.



9. According to BEDMAS, identify the operation which must be performed first. [4 marks]

Integer Expression	Operation to perform first
A) $(-2) - (+5) \div (-3)$	
B) $\frac{(-42)}{(+1) - (-6)}$	
C) $10 + [(-5) - (-6)]$	
D) $(-12) + (-2)^2 - (+3)$	
E) $(-48) \div (+3) \div (-8)$	

10. Evaluate each expression.

A)  $+8 + (-2) \times (-4)$

C.  $20 \div (-4) + (+3) \times (-4)$

B)  $\frac{(+3) + (-15)}{(-7) - (-1)}$

D.  $10^2 \div [(+12) + (-7)]$

11. Blaine drove from Deer Lake to St. John's at an average speed of 100 km/h. After 5 hours of driving Blaine was still 150 km away from St. John's. Determine how far apart Deer Lake and St. John's are from one another.