**Homework Set January 29th - Feb 2nd** **Name_____Block____**

***Remember to show ALL work to receive credit!***

## MONDAY HOMEWORK

***Determine the constant of proportionality*** $\left(\frac{y}{x}\right)$ ***for each table. Express your answer as y=kx***

1. For every can of paint you could paint _____bird houses.

| Cans of paint | 5 | 10 | 6 | 9 | 2 |
|---|---|---|---|---|---|
| Bird houses painted | 15 | 30 | 18 | 27 | 6 |

2. Every chocolate bar has _____calories

| Chocolate bars | 6 | 4 | 10 | 3 | 8 |
|---|---|---|---|---|---|
| Calories | 1,212 | 808 | 2,020 | 606 | 1,616 |

3. For every lawn mowed_____dollars were earned.

| Lawns mowed | 7 | 6 | 10 | 3 | 4 |
|---|---|---|---|---|---|
| Dollars earned | 301 | 258 | 430 | 129 | 172 |

***Determine if the values in the tables are proportional (yes) or not (no).***

| X | Y | | X | Y |
|---|---|---|---|---|
| -70 | -10 | | 9 | 3 |
| -56 | -8 | | 36 | 6 |
| -14 | -2 | | 64 | 8 |
| -7 | -1 | | 81 | 9 |

## TUESDAY HOMEWORK

**Find the final cost of the item(s).**

1. Computer $899.99, 10% discount, 5% sales tax, final cost_____

2. Vacuum, $129.99, 15% discount, 4% sales tax, final cost _____

3. Boots, $39.99, 25% discount, 6% sales tax, final cost_____

4. Phone, $64.99, 75% discount, 8% sales tax, final cost_____

5. Necklace, $39.97, 55% discount, 5% sales tax, final cost_____

## WEDNESDAY HOMEWORK

1. A sweater originally priced at $50 is on sale for 30% off with a 7.5% sales tax. What is the ***final price*** of the sweater?

2. You can buy your favorite crackers and a 10 ounce box for $2.69 or a 1 pound box for $3.28. Which is a better buy? ***Explain***.

Evaluate each expression:

3. $\frac{2 \cdot 4 - 6\,(2+1)}{1 - 3 \cdot 2}$

4. $\frac{2 \cdot 6 - (4+2)}{(-2-4-6) \div (2-1)}$

5. $\frac{3 \cdot 2 \div 6 + 2 \cdot 3 + 6}{3 + 2 + 1}$

## THURSDAY HOMEWORK

1. You are paid $47.25 for working 7 hours. What is your hourly rate? How much would you be paid for working a 40 hour week?

2. Identify which set of ordered pairs show a proportional relationship and which one does not. ***Explain how you know.***

a. (0,0) (2,6) (4,12) (6,18)

b. (0,4) (2,10) (4,16) (6,22)

3. Ayanna runs 1600 meters and 5 minutes 30 seconds, and Kelsey runs 800 meters and 2 minutes 40 seconds. Who has the faster average speed? ***Explain your reasoning.***

4. $-2.7 - (-\frac{4}{5})$