

## Assignment Homework Set February 19-February 23 due 02/23/2018 at 11:59pm EST

1. (1 point) Simplify

$$-1x + (-8x) + 6 = \underline{\hspace{2cm}}$$

2. (1 point) Simplify

$$8 + 5 - 7 = \underline{\hspace{2cm}}$$

$$8 + (5 - 7) = \underline{\hspace{2cm}}$$

$$8 - 5 - 7 = \underline{\hspace{2cm}}$$

$$8 - (5 - 7) = \underline{\hspace{2cm}}$$

3. (1 point) Simplify

$$2 + 9x + 0 = \underline{\hspace{2cm}}$$

$$2 + (9x + 0) = \underline{\hspace{2cm}}$$

$$2 - 9x + 0 = \underline{\hspace{2cm}}$$

$$2 - (9x + 0) = \underline{\hspace{2cm}}$$

4. (1 point) Simplify

$$4 + 6 + 3 - 4 = \underline{\hspace{2cm}}$$

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

$$4 + 6 - 3 - 4 = \underline{\hspace{2cm}}$$

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

5. (1 point) Simplify

$$4x + 8 + 2x - 1 = \underline{\hspace{2cm}}$$

$$4x + 8 + (2x - 1) = \underline{\hspace{2cm}}$$

$$4x + 8 - 2x - 1 = \underline{\hspace{2cm}}$$

$$4x + 8 - (2x - 1) = \underline{\hspace{2cm}}$$

6. (1 point) Evaluate:  $6 \cdot 3 - 2 \cdot 2^2 + 6(10 - 6)$ Answer:  $\underline{\hspace{2cm}}$ 

7. (1 point) Simplify

$$-9x + (-1x) + 4x = \underline{\hspace{2cm}}$$

8. (1 point) Use the order of operations to simplify:

$$(a) 4(-4) - 3(-5) = \underline{\hspace{2cm}}$$

$$(b) 4(-2)^2 - 6(-1)^2 = \underline{\hspace{2cm}}$$

9. (1 point) Evaluate:  $4 \cdot 5 - 3 \cdot 3^2 + 5(6 - 8)$ Answer:  $\underline{\hspace{2cm}}$ 10. (1 point) The table below shows the price  $y$  of ground beef based on weight,  $x$ .

<b>x (lb)</b>	1.75	2.25
<b>y (\$)</b>	\$3.85	\$4.95

Given that  $y$  is proportional to  $x$ , write an equation that can be used to find the price,  $p$ , of  $t$  tickets.

What would be the price of 3 pounds of meat?

11. (1 point)

Carlos bought 3 gallons of ice cream for \$9.50.  
Which proportion can be used to find the cost of 7 gallons of ice cream?

A.  $\frac{3}{7} = \frac{x}{9.5}$

B.  $\frac{3}{9.5} = \frac{x}{7}$

C.  $\frac{7}{9.5} = \frac{x}{3}$

D.  $\frac{9.5}{3} = \frac{x}{7}$

12. (1 point)

Solve the following proportions:

(a)  $\frac{15}{k} = \frac{6}{22}$

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

(b)  $\frac{12}{25} = \frac{x}{88}$

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

13. (1 point)

Simplify

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

14. (1 point) Here are three stacks of coins. Stack A has 20 coins, stack B has 13 coins, and stack C has 19 coins.



(A)

(B)

(C)

What percent of the total coins is in Stack B?

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

15. (1 point) A baseball team won 75% of its games. If the team played 48 games, how many games did it win?

16. (1 point)

Fill in the blanks with percent. Don't use calculator or paper/pencil. Use mental math.

a. 20 is \_\_\_\_\_ of 10?

b. 6 is \_\_\_\_\_ of 2?

17. (1 point) The shaded area of the picture below shows what part of the yard Jessie mowed in 30 minutes.



She wonders about how long it takes her to mow the WHOLE yard. Write a note to Jessie

A. telling her about how long it takes to mow her WHOLE yard, and

B. explaining to her how you found your answer.

18. (1 point) Evaluate:  $7 \cdot 3 - 2 \cdot 2^2 + 5(9 - 3)$

Answer: \_\_\_\_\_

19. (1 point) Simplify

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

20. (1 point) Simplify

$$4b - (7b + 2) = \underline{\hspace{2cm}}$$

21. (1 point) Use the order of operations to simplify:

(a)  $7^2 - 27 \div 3^2 \cdot 4 - 8 = \underline{\hspace{2cm}}$

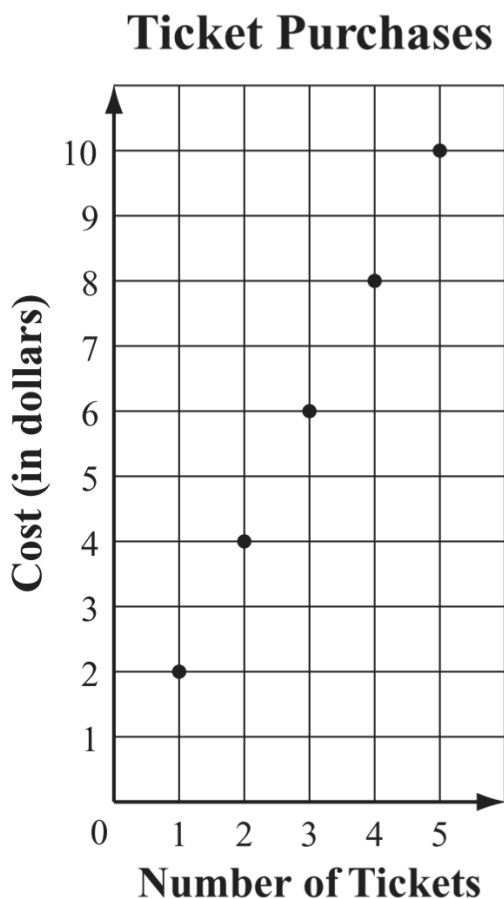
(b)  $\frac{5 \cdot 2 - 2^2}{[3^2 - (-3)]^2} = \underline{\hspace{2cm}}$

22. (1 point) Use the order of operations to simplify:

(a)  $[5 - (11 - 13)] - [6 - (4 - 4)] = \underline{\hspace{2cm}}$

(b)  $2 \cdot 2 - 3 + 2 \cdot 1 = \underline{\hspace{2cm}}$

23. (1 point) The graph below represents the cost of purchasing different numbers of tickets to a school play.



As the number of tickets purchased increases by 1, how does the cost of the ticket purchase change?

A. It increases by \$0.50.

B. It increases by \$1.00.

C. It increases by \$2.00.

D. It increases by \$4.00.

24. (1 point) What expression is the result when  $2a - 5$  subtracted from  $3a + 3$ ? Put your answer in simplest (standard) form.

