Assignment HomeworkSetFebruary12-February16 due 02/16/2018

1. (1 point)
Write the sum of $x+x+x+3$ and $x+x+x+x-6$ in simplified (standard) form.

_____

2. (1 point) Write the sum of $x+x+x+2$ and $x+x+x+x+x$ in simplified (standard) form.

_____

3. (1 point) The table below shows the price of movie tickets.

Number of tickets (t)	3	6	8
Price (p)	$19.50	$39.00	$52.00

Write an equation that can be used to find the price, p, of t tickets.

_____

4. (1 point)　　　Simplify

$-7x+(-6x)+7x=$ _____

5. (1 point)　　　Pat cleans windows during the summer. He charges $50 per house and an additional $5 per window. Write an expression to represent how much Pat would charge to clean x windows at 1 house.

_____

6. (1 point)　　　Simplify

$4(9x)+2y(2) =$ _____

$2 \cdot 5z =$ _____

$4(9x)+2y(2)+2 \cdot 5z =$ _____

7. (1 point)　　　Simplify

$2b-(8b-3)=$ _____

8. (1 point)　　　Simplify

$7+4(5+w)=$ _____

9. (1 point)　　　Simplify

$4b-7(8b-3)=$ _____

10. (1 point)　　　Simplify

$3(x+4)+5x-14=$ _____

11. (1 point)

Which expression below has been simplified using the correct procedure?

A.　$2 + 4(x + 2)$
　　$2 + 4x + 8$
　　$4x + 10$

B.　$2 + 5(x - 7)$
　　$7(x - 7)$
　　$7x - 49$

C.　$4 - 7(x + 5)$
　　$4 - 7x + 5$
　　$-7x + 9$

D.　$7 - 3(x - 5)$
　　$7 - 3x - 15$
　　$-3x - 8$

12. (1 point) The table below shows how many scoops of hot chocolate mix are needed in order to make different numbers of cups of hot chocolate.

Hot Chocolate Mix Recipe

Number of cups of Hot Chocolate (c)	2	4	6	8
Number of scoops of Mix Needed (s)	4	8	12	16

Write an equation that can be used to find the number of scoops (s) of hot chocolate mix needed to make c cups of hot chocolate.

_____

13. (1 point)　　　What expression is the result when $2a-5$ subtracted from $3a+3$? Put your answer in simplest (standard) form.

_____

14. (1 point)

Diana had a coupon for c dollars off of each box of crackers. Diana bought 2 boxes of crackers for $4.50 - c$ dollars each. She also bought 8 cans of soup for s dollars each. The total amount, in dollars, she spent on the cans of soup and boxes of crackers is represented by the expression below.

$$2(4.50 - c) + 8s$$

Which expression also represents the total amount, in dollars, she spent?

A.　$6.50 - 2c + 8s$

B.　$6.50 - 2c + 10s$

C.　$9 - c + 8s$

D.　$9 - 2c + 8s$

15. (1 point) A. Leo bought a used car for x dollars. One year later, the value of the car was $0.88x$. Which expression is another way to describe the change in the value of the car?

- 0.12% decrease
- 0.88% decrease
- 12% decrease
- 88% decrease

B. Based on the answer to A, Leo wrote the following expression to represent the new value of the car.

$$x - 0.12x$$

For parts B and C, use the particular value $x = 3500$ to test whether the two expressions are equivalent.
B. What is the value of the expression $0.88x$ if $x = 3500$?

_____.

C. What is the value of the expression $x - 0.12x$ if $x = 3500$?

_____.

D. Is the expression $x - 0.12x$ equivalent to $0.88x$?

E. Justify your answer to part D.

16. (1 point)

Use the distributive property to write an equivalent expression that has no grouping symbols.

$$-(B+6)$$

$$= \text{_____}$$

17. (1 point)   Write each of these as a sum of two terms using the distributive law.

$5(x+5) =$ _____

18. (1 point)   Write each of these as a sum of two terms using the distributive law.

$-2(x+9) =$ _____

19. (1 point)   Write each of these as a sum of two terms using the distributive law.

$6(x-4) =$ _____

20. (1 point)   Write each of these as a sum of two terms using the distributive law.

$-3(x-3) =$ _____

21. (1 point)   Write each of these as a sum of two terms using the distributive law.

$3(4x-9) =$ _____

22. (1 point)   Write each of these as a sum of two terms using the distributive law.

$-2(8x-5) =$ _____

23. (1 point)   Write each of these as a sum of two terms using the distributive law.

$2(-6x+3) =$ _____

24. (1 point)   Write each of these as a sum of two terms using the distributive law.

$-2(-6x-3) =$ _____

25. (1 point)   Write each of these as a sum of terms using the distributive law.

$5(4c+3d+1) + 8(7c+5) =$ _____.

$4 \times 7 + 8(4a+5) + 11(4a+1) =$ _____.

$8 \times 14a + 7(4a+4) =$ _____.

$8[8(x+7) + 7(4x+3)] =$ _____.