

Name:

**ANSWERS!**

Period:



Communication



Successful Partnership



Encouragement



Solving Problem Together



Collaboration

## Lesson 6-6 Classwork

## No Calculators

1. Select all expressions that are equivalent to:  $3x + 4x + (7 - x) + 5$

$$\underline{3x} + \underline{4x} + \underline{7} - \underline{x} + \underline{5}$$

$$3x + 4x - x + 7 + 5$$

$$\boxed{6x + 12}$$

~~(a)~~  
 $8x + 2$

(b)  
 $6x + 12$

(c)  
 $\underline{7x} + 12 - \underline{x}$   
 $= \underline{6x} + 12$

~~(d)~~  
 $3x - 12 + 3x$   
 $6x - 12$

(e)  
 $\underline{3x} + 12 + \underline{3x}$   
 $6x + 12$

2. Select all expressions that are equivalent to:  $5x + (x + 7) - 2x$

$$\underline{5x} + \underline{x} + \underline{7} - \underline{2x}$$

$$5x + x - 2x + 7$$

$$\boxed{4x + 7}$$

(a)  
 $3x + (x + 7)$   
 $3x + x + 7$   
 $4x + 7$

~~(b)~~  
 $(x + 7) - 3x$   
 $x + 7 - 3x$   
 $-2x + 7$

(c)  
 $(x + 7) + 3x$   
 $x + 7 + 3x$   
 $4x + 7$

(d)  
 $4x + 7$

(e)  
 $7 + 4x$   
 $4x + 7$   
Keep sign to the left!

3. Select all expressions that are equivalent to:  $7x + (x + 8) - 3x - 2$

$$\begin{aligned} & \underline{7x} + \underline{x} + \underline{8} - \underline{3x} - \underline{2} \\ & 7x + x - 3x + 8 - 2 \\ & \boxed{5x + 6} \end{aligned}$$

~~(a)~~  
 $5x - 10$

(b)  
 $5x + 6$

~~(c)~~  
 $8x + 6 + 3x$   
 $11x + 6$

~~(d)~~  
 $8x - 6 - 3x$   
 $5x - 6$

(e)  
 $8x + 6 - 3x$   
 $5x + 6$

4. Select all expressions that are equivalent to:  $-3(-6 - 4b)$

$$\begin{aligned} & \text{↻ ↻} \\ & \boxed{18 + 12b} \end{aligned}$$

~~(a)~~  
 $18 - 12b$

(b)  
 $18 + 12b$

(c)  
 $2(9 + 6b)$   
 $18 + 12b$

(d)  
 $-2(-9 - 6b)$   
 $18 + 12b$

~~(e)~~  
 $-18 + 12b$

5. Select all expressions that are equivalent to:  $7x - (-x + 2) - 10$

$$\begin{aligned} & \text{↻} \\ & \underline{7x} + \underline{x} - \underline{2} - \underline{10} \\ & \boxed{8x - 12} \end{aligned}$$

~~(a)~~  
 $-2(-4x - 6)$   
 $8x + 12$   
↻  
↑

(b)  
 $-2(-4x + 6)$   
 $8x - 12$   
↻

~~(c)~~  
 $-2(4x - 6)$   
 $-8x + 12$   
↻  
↑ ↑

~~(d)~~  
 $2(-4x + 6)$   
 $-8x + 12$   
↻  
↑

(e)  
 $2(4x - 6)$   
 $8x - 12$   
↻