

ASSIGNMENT #3: DISTRIBUTIVE PROPERTY

Simplify the expressions using the distributive property.

1: $5(x + 5)$

2: $7(x - 12)$

3: $x(14 + 3)$

4: $-6(x + 8)$

5: $4(1 + 9x)$

6: $6(-5x + 7)$

7: $-8(-4 - 3x)$

8: $8(-x - 4)$

9: $\frac{1}{2}(8x + 10)$

10: $\frac{1}{4}(16 - 22x)$

11: $3(x - y)$

12: $4(2x - 7y)$

13: $3(y + 2z - 2.5)$

14: $11(x - 12x)$

15: $\frac{2}{3}(-9 - 15x)$

CHALLENGE PROBLEMS:

$(x + 9)(x - 11)$

ANSWER KEY

1. $5x + 25$
2. $7x - 84$
3. $14x + 3x$ **OR** $17x$
4. $-6x - 48$
5. $4 + 36x$
6. $-30x + 42$
7. $32 + 24x$
8. $-8x - 32$
9. $4x + 5$
10. $4 - \frac{11}{2}x$ *or* $4 - 5\frac{1}{2}x$
11. $3x - 3y$
12. $8x - 28y$
13. $3y + 6z - 7.5$
14. $11x - 132x$ **OR** $-121x$
15. $-6 - 10x$

CHALLENGE

$$x^2 - 2x - 99$$