Practice Assignment   **0   25   50   75   100**

Directions: Identify each Property of Operations or Property of Equality.

1. $6 + 0 = 6$ 2. $4 \cdot 5 = 5 \cdot 4$ 3. $4(x + 6) = 4x + 24$

4. $\frac{1}{5} \cdot 5 = 1$ 5. $x - 4 + 4 = 5 + 4$ 6. If $-3 = y$, then $y = -3$

Directions: For each equation that has been solved, name the property that describes each step of the equation solving process.

7.

$5x + 15 = 75$	Given
$5x = 60$	
$x = 12$	

8.

$\frac{t}{3} + 14 = 29$	Given
$\frac{t}{3} = 15$	
$t = 45$	

9.

$3(x - 2) = 12$	Given
$3x - 6 = 12$	
$3x = 18$	
$x = 6$	

10.

$3(x + 2) - 7 + 2x = 14$	Given
$3x + 6 - 7 + 2x = 14$	
$5x - 1 = 14$	
$5x = 15$	
$x = 3$	

11.

$3x + 15 - 9 = 2(x + 2)$	Given
$3x + 6 = 2(x + 2)$	
$3x + 6 = 2x + 4$	
$x + 6 = 4$	
$x = -2$	

Solve each equation and determine if it has one solution, no solution, or infinite solutions.

12. $4(2x + 1) - 3(x - 2) = 10 + 5x$

13. $10(x - 2) + 15 = 8x + 7$

14. $x + 6(x - 1) = 7(3 + x)$

15. $12x + 9 - 4x - 4 = 3x - 7 - x + 30$

16. $3(3x + 4) - 2x - 5 - 7x = 20$

17. $-9x + 12 + 4(3x - 3) = 7(x - 2) - 4x + 14$