

Name _____

SOLVING EQUATIONS—THE DISTRIBUTIVE PROPERTY #2

Directions: Solve for x in each equation below. You can attack this problem several ways. *Example 1* shows you how to use the distributive property to simplify the equations, then use inverse operations to isolate the variable. *Example 2* shows you how to divide both sides by the number being distributed, then use inverse operations to isolate the variable.

Examples: $3(2x - 10) = 48$ (distribute 3 to each term) $5(2x - 3) = 25$ (divide by 5 on both sides)
 $6x - 30 = 48$ (add 30 to both sides) $2x - 3 = 5$ (add 3 to both sides)
 $6x = 78$ (divide both sides by 6) $2x = 8$ (divide both sides by 2)
 $x = 13$ **$x = 4$**

1) $4(2x - 10) = 16$

2) $3(4x - 3) = 27$

3) $2(x - 10) = 60$

4) $4(3x - 4) = 68$

$x =$ _____

$x =$ _____

$x =$ _____

$x =$ _____

5) $5(2x - 3) = 45$

6) $7(4x - 1) = 49$

7) $2(10x - 10) = 60$

8) $4(3x - 2) = 76$

$x =$ _____

$x =$ _____

$x =$ _____

$x =$ _____

9) $5(2x - 10) = 30$

10) $2(12x - 1) = 22$

11) $15(x - 3) = 60$

12) $2(20x - 2) = 36$

$x =$ _____

$x =$ _____

$x =$ _____

$x =$ _____