

## Unit 2: Equations

### Worksheet 3: Solving Multi-Step Equations

### Modeling

Directions: Solve each equation. Show your work, NEATLY & ORGANIZED

1.  $4n - 2n = 4$

2.  $-12 = 2 + 5v + 2v$

3.  $3 = x + 3 - 5x$

4.  $x + 3 - 3 = -6$

5.  $-12 = 3 - 2k - 3k$

6.  $-1 = -3r + 2r$

7.  $6 = -3(x + 2)$

8.  $-3(4r - 8) = -36$

9.  $24 = 6(-x - 3)$

10.  $75 = 3(-6n - 5)$

11.  $-3(1 + 6r) = 14 - r$

12.  $6(6v + 6) - 5 = 1 + 6v$

**13.**  $-4k + 2(5k - 6) = -3k - 39$

**14.**  $-16 + 5n = -7(-6 + 8n) + 3$

**15.**  $10p + 9 - 11 - p = -2(2p + 4) - 3(2p - 2)$

**16.**  $-10n + 3(8 + 8n) = -6(n - 4)$

**17.**  $10(x + 3) - (-9x - 4) = x - 5 + 3$

**18.**  $12(2k + 11) = 12(2k + 12)$

**19.**  $-12(x - 12) = -9(1 + 7x)$

**20.**  $-11 + 10(p + 10) = 4 - 5(2p + 11)$

**21.** Explain two ways you could solve  $20 = 5(-3 + x)$