

Variables on Both Sides

Hour _____

Steps**1. Just working with one side of the equation at a time, simplify (Distribute → Combine Like Terms).****2. Eliminate the term with the variable on one of the sides of the equal sign (before dealing with constants).****3. Solve (by reversing order of ops when possible).**

1) $3 + 2r - 1 + 10 = 2r + 4r$

2) $-n - 1 = 4 - 4n + 2n$

3) $-7 + 2x = -2 + x$

4) $11 - 2n = n + 5 - 6$

5) $2x + 10 = 3x + 5$

6) $n + 6 = -2n - 9$

7) $-4 - (3 - k) = -21 - 6k$

8) $2(3m - 2) = -8 + 4m$

$$9) n + 3(4n - 3) = -30 + 6n$$

$$10) 5k - 3(1 + k) = -2k + 13$$

$$11) -2(n + 5) = 3n - 25$$

$$12) 13 - 6x = -5(5x + 5)$$

$$13) -5a + 8 = -4(5a - 2)$$

$$14) -5(4x - 2) - 3x = -3x - 30$$

$$15) 5r + 6(-5r + 6) = -3(2 + 6r)$$

$$16) 3(x + 6) = 5(x + 1) + 5$$

$$17) -3(3r - 5) = 2(-4r + 6)$$

$$18) 5(-2x + 6) = -4(5 + 5x)$$

$$19) 2(6 + 3x) = 4(6 + 3x)$$

$$20) 5(5x + 5) - 1 = -1 - 5(-3 - 3x)$$