

Section 1.2 (Solving Multi-Step Equations)
Part II: Combining Like Terms and Using the Distributive Property

1) $4x - 3 + 2x = -9$
 $x = -1$

2) $4 - 3x + 2 = -9$
 $x = 5$

3) $4x + 3 - 2x + 1 = -9$
 $x = -6.5$

4) $1.1x - 5.4 + 1.2x = -10$
 $x = -2$

5) $\frac{2}{3}n + 11 - \frac{1}{3}n = 8$
 $n = -9$

6) $1.5n + 12 - \frac{1}{2}n - 5 = 7.8$
 $n = 0.8$

7) A 22-foot house has a 4-foot attic. If the house has two stories that have the same height, how tall is each story of the house?

a) Equation: $2x + 4 = 22$

b) Solution: Each story is **9** feet tall.

8) The narrowest angle of a triangle is 30° . The larger of the other two angles is twice the size of the other one. What are the measurements of all three angles?

a) Equation: $a + 2a + 30 = 180$

b) Solution: 30° , **50°** , **100°**

9) $4(3 - 2n) = 20$
 $n = -1$

10) $\frac{1}{2}(n + 8) = 4$
 $n = 0$

11) $-2(n - 3) = 16$
 $n = -5$

12) $2 - 4(3 - 2n) = 14$
 $x = 3$

13) $2 + 4(3 - 2n) = 14$
 $x = 0$

14) $2(2 - x) + 12x = 44$
 $x = 4$