

**LEVEL: EMERGING**

- 1) Which choice is *not* a step you would take to solve the equation  $4 - \frac{x}{2} = 0$ ?
- a) Add -4 to both sides of the equation
  - b) Divide both sides by -2
  - c) Multiply each term by -2
  - d) Subtract 4 from both sides

**COMBINING LIKE TERMS:** Directions: Solve the equation. Check your solution.

2)  $p + 2p - 3 = 6$

3)  $11w - 9 - 7w = 15$

4)  $6c - 8 - 2c = -16$

**USING THE DISTRIBUTIVE PROPERTY:** Directions: Solve the equation. Check your solution.

5)  $3 + 4(z + 5) = 31$

6)  $5m + 2(m + 1) = 23$

7)  $27 = 3c - 3(6 - 2c)$

**MULTIPLYING BY THE RECIPROCAL:** Directions: Solve the equation. Check your solution.

8)  $\frac{1}{3}(d + 3) = 5$

9)  $4 = \frac{2}{9}(4y - 2)$

10)  $-32 = \frac{8}{7}(3w - 1)$

Answers:

- 1) b      2)  $p = 3$       3)  $w = 6$       4)  $c = -2$       5)  $z = 2$       6)  $m = 3$       7)  $c = 5$       8)  $d = 12$   
9)  $y = 5$       10)  $w = -9$

## LEVEL: PROFICIENT

**SOLVING EQUATIONS:** Directions: Solve the equation. Check your solution.

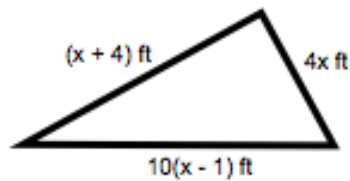
11)  $8.9 + 1.2(3a - 1) = 14.9$

12)  $1.6 = 7.6 - 5(k + 1.1)$

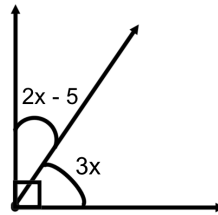
13)  $8.7 = 3.5m - 2.5(5.4 - 6m)$

**GEOMETRY:** Directions: Find the value of  $x$ .

14) *Perimeter = 24 feet*



15) *If two angles shown form a right angle, write and solve an equation to find the value of  $x$  and the measure of both angles.*



## LEVEL: MASTERY

16) A farmer bought a pig weighing 30 pounds. He expects it to gain 13 pounds a month, and he plans on selling the pig when it weighs approximately 212 pounds. How many months will it be before he can sell the animal?

17) James earns \$2.20 less than twice Greg's hourly wage. If James earns \$16.50 per hour, what is Greg's hourly wage?



Answers:

11)  $a = 2$

12)  $k = 0.1$

13)  $m = 1.2$

14)  $x = 2$

15)  $x = 19$ ; angle 1 =  $57^\circ$ , angle 2 =  $33^\circ$

16) 14 months

17) \$9.35