Solve for the unknown in each of the following:

1.
$$5x - 3 = 7$$

2.
$$3 = 25t^2 - 13$$

3.
$$5(4)^2 + 2b = 5$$

4.
$$5 - \frac{4}{7}a = 12$$

5.
$$\frac{8x}{5x-4} = 7$$

6.
$$t^2 + t - 6 = 0$$

7.
$$\frac{5.4}{x} - 4.3 = 7.2$$

8.
$$5.1t - d = 3$$

 $3.3d - 2.4t = 9$

9.
$$4 = \frac{v^2 - (a)^2}{2(9.8)}$$
 where $a = -7.2$

10.
$$\frac{2x^2-5}{2x-5} = x+3$$

6 Practice

• • • • Solving More Equations

Directions: Solve the following literal equations for the indicated variable.

1. c + d + y = b Solve for y.

2. tx = a + b Solve for x.

3. sm + w = p Solve for m.

4. x - t = r Solve for x.

5. $\frac{x}{b} = a$ Solve for x.

6. x + y = w Solve for x.

7. dx = b Solve for x.

8. x + b = p Solve for x.

9. h = wx Solve for x.

10. cy = d - a Solve for y.

11. A = lw Solve for l.

12. d = rt Solve for t.

13. bx + y = z Solve for x.

14. cr + s = t Solve for r.

15. $\frac{ab}{c} = d$ Solve for b.

16. $\frac{rs}{t} = v$ Solve for s.

17. w = x + yz Solve for z.

18. $c^2 = a^2 + b^2$ Solve for *b*.

19. The formula for finding the circumference of a circle with radius r is $C = 2\pi r$. Find the value of r ($\pi = 3.14$).

20. The formula for finding the perimeter of a rectangle with length l and width w is P = 2l + 2w. Find the value of w.