

PROBLEM SET 1-3
(Solving Equations)

Solve each equation.

1. $15 - g = 23 - 2g$

2. $5y + 1.8 = 4y - 3.2$

3. $7y + 4 = 3 - 2y$

4. $4y - 8 - 2y + 5 = 0$

5. $2 - 3(x + 4) = 8$

6. $2(x + 4) = 8$

7. $4w - 2(1 - w) = -38$

8. $10(1 - 2y) = -5(2y - 1)$

9. $12 - 3(2w + 1) = 7w - 3(7 + w)$

10. $7(a + 1) - 3a = 5 + 4(2a - 1)$

Solve each formula for the indicated variable.

11. $s = \frac{1}{2}gt^2$, for g

12. $I = prt$, for r

13. $V = \pi r^2 h$, for h

14. $R(r_1 + r_2) = r_1 r_2$ for r_2

15. $h = vt - 5t^2$, for v

Solve each equation for x. Find any restrictions.

16. $bx - cx = -c$

17. $\frac{x}{a} - 5 = b$

18. $\frac{3ax}{5} - 4c = \frac{ax}{5}$

19. $\frac{a - c}{x - a} = m$