

Solving Two-Step and Three-Step Equations

Solve each equation. Show your work and check your solution.

1. $2x + 13 = 35$

2. $3(2x + 4) = 60$

3. $5p - 8 = 42$

4. $-9x - 1 = 44$

5. $4 = \frac{y}{11} - 2$

6. $-x + 1.2 = 12.8$

7. $-2 + \frac{y}{10} = -6$

8. $45 = 5(3x - 6)$

9. $7(2x - 3) = 7$

10. $-3d - 7d = -30$

11. $8 - 4x = 36$

12. $\frac{l}{3} + 16 = 34$

Write an equation for each statement. Solve each problem and check your solution.

13. Eight more than twice a number is eight. Find the number.

14. Seven decreased by three times a number is forty. Find the number.

15. Johanna starts the month with \$54 in her savings account. At the end of each week, Johanna adds \$8 to the account.

a) How much will Johanna have in her account after 5 weeks?

b) Write a formula that could be used to calculate Johanna's total savings (S) based on how many weeks (w) she has deposited money in the bank.

c) Use your formula to determine how many weeks have passed when Johanna reaches \$166 in her account.

***** Challenge Set*****

1. $-8p + 7 + 5 = 12$

2. $4(7n + 8) + 2(8 - n) = 48$

3. $7(3 + 4b) + 2 = -173$

4. $\frac{k+4}{2} = -2$

5. $1\frac{2}{3}x + 5 = 14$