

Solve each equation. Show your work.

1. $2(m + 3) = 20$

2. $4t - 3 + 6t = -33$

3. $7 = 6x - x - 3$

4. $18 = \frac{1}{2}(3h + 8) + 6$

5. $7 - 3(4x - 15) = 12$

6. $\frac{2}{3}(6y - 9) = -6$

7. $-\frac{1}{3}(2y + 12) = 26$

8. $3(m + 3) - 5 = 16$

9. $2n + n + 3(n + 4) = 24$

10. $38 = 3(x + 2) + 5x$

11. $4m + 2(m + 2) = -8$

12. $43 = 3(x + 2) + 2(2x + 1)$

13. $3h + 5 + 2(3h + 2) = 0$

14. $4n + 2(n + 10) = 62$

15. $8m + 2(6 + m) = 72$

16. Jennifer solved the following problem incorrectly.

$$4 - 2(x - 5) = 12$$

$$4 - 2x - 10 = 12$$

$$-6 - 2x = 12$$

$$+6 \quad +6$$

$$\frac{-2x}{-2} = \frac{18}{-2}$$

$$x = -9$$

Copy the problem, circle the mistake, explain what Jennifer did wrong, then re-work the problem correctly.

17. Fred solved the following problem incorrectly

$$5(p+3) - 6 = 39$$

$$5p + 3 - 6 = 39$$

$$5p - 3 = 39$$

$$5p = 42$$

$$p = \frac{42}{5}$$

Copy the problem, circle the mistake, explain what Fred did wrong, then re-work the problem correctly.

Simplify.

18. $5(-2) + 6(-3)$

19. $7 - 4^2 + 6(4 - 2)$

20. $2^4 - 5(3 + 1)$

21. $-2 + |3 - 8|$

22. $\frac{7(7 - 2)}{28 \div 4}$

23. $30 \div 3(2)$