

Name: _____

Solving Multi-Step Equations



Directions: Solve each equation.

1. $2x + 5 = 17$

9. $-3x + 4 = 2x - 6$

2. $3(x + 4) = 30$

10. $5y - 2 = y + 20$

3. $4x - 7 = 3x + 10$

11. $3(2x - 1) = 12 + 2(x + 4)$

4. $2(x - 3) + 4 = 12$

12. $4(3x - 2) + 7 = 31$

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

13. $-3(2x + 4) = 8 - 2(5x - 3)$

6. $3(2x - 5) + 4 = 16$

14. $2a - 5 = 17$

7. $2(3x + 2) - 7 = 15$

15. $2(2x + 3) = 14 - 4(x - 2)$

8. $5(a + 3) - 4(a - 2) = 22$

16. $3(x + 1) = 4x + 1$

ANSWER KEY

1. $2x + 5 = 17$
 $x = 6$

2. $3(x + 4) = 30$
 $x = 6$

3. $4x - 7 = 3x + 10$
 $x = 17$

4. $2(x - 3) + 4 = 12$
 $x = 7$

5. $5y - 8 = 2(y + 1)$
 $y = 10/3$

6. $3(2x - 5) + 4 = 16$
 $x = 9/2$

7. $2(3x + 2) - 7 = 15$
 $x = 3$

8. $5(a + 3) - 4(a - 2) = 22$
 $a = -1$

9. $-3x + 4 = 2x - 6$
 $x = 2$

10. $5y - 2 = y + 20$
 $y = 11/2$

11. $3(2x - 1) = 12 + 2(x + 4)$
 $x = 23/4$

12. $4(3x - 2) + 7 = 31$
 $x = 8/3$

13. $-3(2x + 4) = 8 - 2(5x - 3)$
 $x = 13/2$

14. $2a - 5 = 17$
 $a = 11$

15. $2(2x + 3) = 14 - 4(x - 2)$
 $x = 2$

16. $3(x + 1) = 4x + 1$
 $x = 2$