

Practice Problems

Solve each of the following equations. Make sure to check your solutions.

1. $2x - 3 = 7x + 22$

2. $2a - 7 = 5a - 7$

3. $3x + 2 = 3x + 2$

4. $5y - 1 = 5y + 3$

5. $-3x + 1 = 8x - 4$

6. $2m + 11 = -m - 1$

7. $6x - 7 = -4x + 13$

8. $3p - 1 = -2p + 1$

9. $3(x - 2) - 2(2x - 1) = 2 - 3(x + 4)$

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

11. $2(-3x + 1) - 5(x - 2) = -2(x - 7)$

12. $2(3m - 5) - (3 - m) = 6(m - 2)$

13. $\frac{1}{2}(3x - 1) - \frac{1}{3}(x + 5) = \frac{1}{6}(5x + 2)$

14. $8x - 3(2x - 7) = 7 - 2(3x + 1)$

15. $3(q - 4) - 4(2q - 1) = 2(5q - 4)$

Answers

1.) -5 2.) 0 3.) all numbers are solution 4.) no solution 5.) $\frac{5}{11}$ 6.) -4 7.) 2 8.) $\frac{2}{5}$

9.) -3 10.) no solution 11.) $-\frac{2}{9}$ 12.) 1 13.) $\frac{15}{2}$ 14.) -2 15.) 0