

Worksheet 8-8 - PreAlgebra

Solving Multi-Step Equations and Inequalities

Solve. Check your solutions.

1. $4(j - 7) = 12$

2. $5(2k + 10) = 40$

3. $7(2p + 3) - 8 = 14p - 13$

4. $7(g - 4) = 3$

5. $3(4c + 5) = 24$

6. $2(a - 1) = 3(a + 1)$

7. $3(x - 3) = 5(1.5 + x)$

8. $2(1.5m + 3) = 3.5m - 1$

9. $a - \frac{1}{2} = 2a - \frac{3}{5}$

10. $2\frac{1}{5}x - 5 = 2(1\frac{2}{5}x + 3)$

11. $\frac{d}{0.2} = 3d + 2.1$

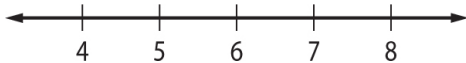
12. $5n + 3 = 2(n + 2) + 3n$

13. $\frac{2}{3}a + 2 = \frac{1}{3}(4a + 1)$

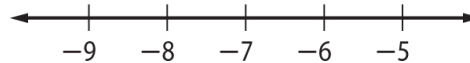
14. $y - 7 = \frac{1}{4}(y + 2)$

Solve. Graph each solution on a number line.

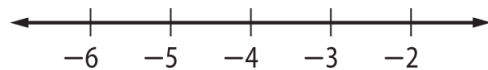
15. $\frac{2}{3}(12 - x) > 4$



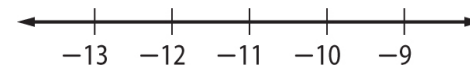
16. $\frac{1}{2}(8 - c) < 7.5$



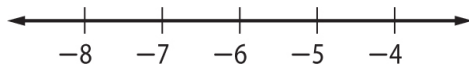
17. $\frac{c}{3} + 7 > 5\frac{1}{2}$



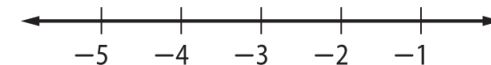
18. $7 + 2p < -14$



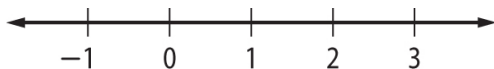
19. $-3(x + 3) > 7.5$



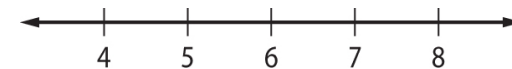
20. $5 - 3c \leq c + 17$



21. $2(n - 5) \leq -7$



22. $\frac{18 - n}{2} \leq 6$



23. The perimeter of a rectangle is 80 feet. Find the dimensions if the length is 5 feet longer than four times the width. Then find the area of the rectangle.

24. Five times the sum of three consecutive integers is 150. What are the integers?

25. Admission to the state fair costs \$5 and each ride costs \$0.75. If Ahmed wants to spend no more than \$14 at the fair, how many rides can he ride?