Lesson 8 Homework Practice

Solving Multi-Step Equations and Inequalities

Solve. Check your solutions.

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

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

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

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

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

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

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

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

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

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

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

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

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

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.
$$5 - 3c \le c + 17$$

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

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

- 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?