

Name \_\_\_\_\_

## Topic 1 Review

**Solve each.**

1.  $n - 8 = -7$

2.  $m + 23 = 7$

3.  $x + 16 = -82$

4.  $w - 63 = 82$

5.  $c + 2.3 = 6$

6.  $d - 8.3 = 7.18$

7.  $h - 2.1 = -3.2$

8.  $f + 2.8 = -3.92$

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

10.  $b + \frac{6}{7} = \frac{1}{3}$

11.  $g - \frac{1}{5} = \frac{4}{7}$

12.  $4x > -100$

13.  $-17x = -68$

14.  $\frac{2}{9}x = 10$

15.  $\frac{-3}{4}x = 5$

16.  $4x + 3 = 43$

17.  $-3y + 2 < 7$

18.  $14a - 8 = 20$

19.  $\frac{8}{9}x - 17 = -1$

20.  $\frac{3}{10}y - 121 = 5$

21.  $2(8x - 7) > 18$

22.  $-3(2y - 5) = -9$

23.  $-5(11x + 3) = 40$

24.  $6x + 11 = 3x - 22$

25.  $12 - 7x < 11x + 30$

26.  $5y - 1 = -16y + 41$

27.  $5 + 6x + 3 = 2(7x - 4)$

28. Solve for  $l$ :  $V = 2\pi r^2 + 2\pi rl$

29. Solve for  $x$ :  $ax + 4 = 7$

30. Solve for  $x$ :  $bx + a = 12$

**Write an equation to describe the situation and solve.**

31. The sum of three consecutive even integers is 72. What are the three numbers?

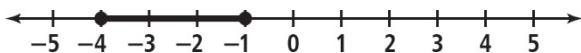
32. The sum of three consecutive integers is -9. What are the three numbers?

**33-35 Solve and graph on a number line and write the answer in interval notation.**

33.  $-2(x - 3) - 4 \geq 3x - 5(x - 1)$       34.  $-2x + 5(x - 2) > 7x - 6$

35.  $2(x - 2) + 7 > -1$  and  $5 - 4x > 9$

36. Write the compound inequality  
for the graph.



**Review:**

37.  $51 - (-42) = \underline{\hspace{2cm}}$

38.  $-105 \div 5 = \underline{\hspace{2cm}}$

39.  $\frac{5}{6} - \frac{3}{8} = \underline{\hspace{2cm}}$

40.  $36 \div 9 \cdot 2 - 5 + 6 = \underline{\hspace{2cm}}$

41.  $4^2 - 5(2 - 4 \cdot 3) = \underline{\hspace{2cm}}$

42.  $83.801 - 62.3 = \underline{\hspace{2cm}}$

43. Evaluate  $3x - y^2$ , when  $x = -5$  and  $y = -3$

44.  $(3x^2 - 4x + 5) - (5x^2 - 7)$