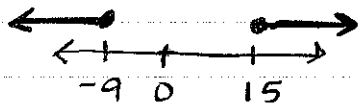


1.5 each new direction, I'll show my work
 18. $|y-3| \geq 12$ GOAL \geq or

$$y-3 \geq 12 \quad \text{or} \quad y-3 \leq -12$$

$$y \geq 15 \quad \text{or} \quad y \leq -9$$



30. $27.25 \leq C \leq 27.75$ tolerance

$$\frac{27.75 - 27.25}{2} = \frac{.5}{2} = .25$$

average $\frac{27.75 + 27.25}{2} = 27.5$

$$|C - 27.5| \leq .25$$

average temp

36. $|3x-1| + 10 = 25$
 $|3x-1| = 15$
 $3x-1 = 15$ and -15
 $+1 \quad +1 \quad \quad +1$
 $3x = 16$ and -14
 $x = \frac{16}{3}$ and $-\frac{14}{3}$

check for extraneous:

$$|3(\frac{16}{3}) - 1| + 10 = 25$$

$$|16-1| + 10 = 25$$

$$25 \neq 25$$

$$|3(-\frac{14}{3}) - 1| + 10 = 25$$

$$|-14-1| + 10 = 25$$

$$25 \neq 25$$

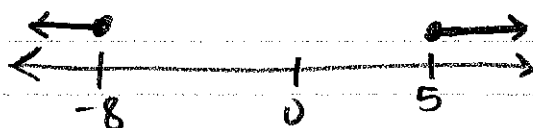
45. $|2x+3| - 6 \geq 7$ GOAL \geq or

$$|2x+3| \geq 13$$

$$2x+3 \geq 13 \quad \text{or} \quad 2x+3 \leq -13$$

$$2x \geq 10 \quad \text{or} \quad 2x \leq -16$$

$$x \geq 5 \quad \text{or} \quad x \leq -8$$



55. 28.5 to 29.0 average $\frac{28.5+29.0}{2} = 28.75$

tolerance $\frac{29}{-28.5}$ $\frac{0.5}{2} = 0.25$
 0.5

$$|C - 28.75| \leq 0.25$$

Answers for Lesson 1-5, pp. 36-38 Exercises

1. $-6, 6$

2. $-8, 8$

3. $-6, 12$

4. $3, -\frac{5}{3}$

5. no solution

6. no solution

7. $-18, 10$

8. $-7, 17$

9. $-7, 15$

10. $-\frac{3}{2}$

11. $\frac{2}{3}$

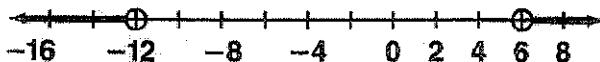
12. $\frac{3}{2}$

13. $-4, 8$

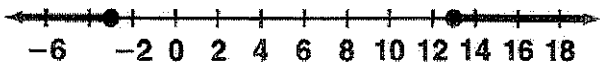
14. $-1, \frac{3}{2}$

15. 1

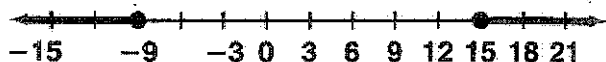
16. $x < -12$ or $x > 6$



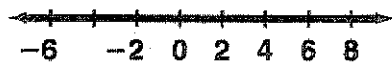
17. $x \leq -3$ or $x \geq 13$



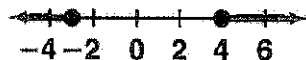
18. $y \leq -9$ or $y \geq 15$



19. All real numbers are solutions.



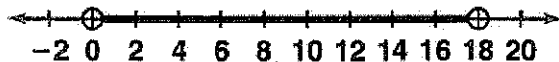
20. $x \leq -3$ or $x \geq 4$



21. $z < -4$ or $z > 4$

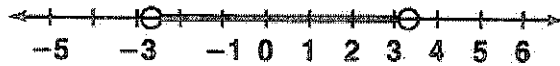


22. $0 < y < 18$

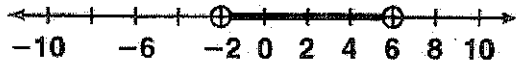


Answers for Lesson 1-5, pp. 36-38 Exercises (cont.)

23. $-2\frac{2}{3} < y < 3\frac{1}{3}$

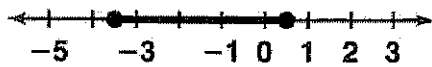


24. $-2 < x < 6$

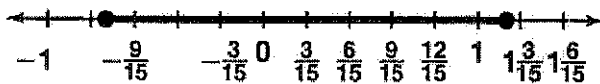


25. no solution

26. $-3\frac{1}{2} \leq w \leq \frac{1}{2}$



27. $-\frac{11}{15} \leq t \leq \frac{17}{15}$



28. $|h - 1.4| \leq 0.1$

29. $|k - 50.5| \leq 0.5$

30. $|C - 27.5| \leq 0.25$

31. $|b - 52.5| \leq 2.5$

32. $|m - 1250| \leq 50$

33. $|d - 0.11885| \leq 0.00015$

34. no solutions

35. $-\frac{3}{2}, -1$

36. $-\frac{14}{3}, \frac{16}{3}$

37. $-\frac{1}{3}$

38. no solutions

39. $\frac{5}{2}$

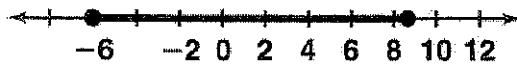
40. $\frac{11}{8}$

41. $-1, -3$

42. $-\frac{71}{36}$

43. 2

44. $-6 \leq x \leq 8\frac{2}{3}$



45. $x \leq -8$ or $x \geq 5$

