Name _____ Class _____ Date _____

Practice 1-1

Properties of Real Numbers

Simplify.

1. $-|4.2|$

2. $|12 - 16|$

3. $\left|-\dfrac{7}{6}\right|$

4. $|3| - |-2|$

5. $\left|\dfrac{2}{3}\right|$

6. $0.3|-6|$

7. $|14 - 8|$

8. $|-0.01|$

Replace each $ with the symbol <, >, or = to make the sentence true.

9. $-\sqrt{6}$ \$ $\sqrt{10}$

10. $\dfrac{3}{2}$ \$ 1.5

11. 0.06 \$ 0.6

12. 4 \$ $|-4|$

13. -0.4 \$ 0

14. $-|-7|$ \$ $|-7|$

15. 0.9 \$ $\dfrac{2}{3}$

16. $\sqrt{2}$ \$ $\sqrt{5}$

Name all the sets of numbers to which each number belongs.

17. -5

18. 0

19. $\sqrt{5}$

20. $2.\overline{7}$

21. 9

22. $\dfrac{10}{7}$

23. $1.2345267831\ldots$

24. $-\dfrac{4}{2}$

Name the property of real numbers illustrated by each equation.

25. $\pi + 3 = 3 + \pi$

26. $\sqrt{2} + 0 = \sqrt{2}$

27. $(2 + x) + 3 = 2 + (x + 3)$

28. $\dfrac{5}{9} \cdot \dfrac{9}{5} = 1$

29. $16(3t + 4v) = 48t + 64v$
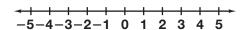
30. $\sqrt{2} \cdot 3 = 3 \cdot \sqrt{2}$

31. $0.01 \cdot 1 = 0.01$

32. $\dfrac{3}{2} \cdot \dfrac{2}{3} = 1$

33. $7 + (-7) = 0$

34. $2(xy) = (2x)y$

Graph the number on the following number line. Estimate if necessary.

35. $-\sqrt{2}$

36. $\dfrac{3}{2}$

37. 0.5

38. -1

Find the opposite and the reciprocal of each number.

39. $-2\dfrac{1}{2}$

40. 3

41. $\dfrac{5}{9}$

42. -4

Which set of numbers best describes the values of each variable?

43. the number of stops N a commuter train makes on a certain day

44. the high H and low L for a certain stock during a period of n weeks

45. the average time per lap t it takes a race car to complete n laps