

1. $\frac{4}{8}, \frac{5}{10}, \frac{6}{12}$

2. $\frac{-5}{-10}, \frac{-7}{-14}, \frac{-9}{-18}$

3-8. Answers may vary.

3. $\frac{2}{12}, \frac{-2}{-12}, \frac{-1}{-6}$

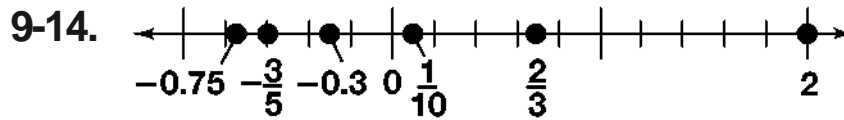
4. $\frac{6}{10}, \frac{-6}{-10}, \frac{-3}{-5}$

5. $-\frac{10}{18}, \frac{-5}{9}, \frac{5}{-9}$

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

7. $\frac{-4}{6}, \frac{-2}{3}, \frac{2}{-3}$

8. $\frac{8}{14}, \frac{-8}{-14}, \frac{-4}{-7}$



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

16. $-\frac{5}{6}$

17. $\frac{5}{6}$

18. $-\frac{7}{10}$

19. $\frac{1}{9}$

20. $\frac{1}{9}$

21. 44 ft/s²

22-27. Answers may vary.

22. $\frac{1}{4}, \frac{-1}{-4}, \frac{-2}{-8}$

23. $-\frac{4}{10}, \frac{-2}{5}, \frac{2}{-5}$

24. $\frac{1}{3}, \frac{-1}{-3}, \frac{-4}{-12}$

25. $-\frac{4}{9}, \frac{-12}{27}, \frac{12}{-27}$

26. $\frac{14}{22}, \frac{-14}{-22}, \frac{-7}{-11}$

27. $\frac{-10}{26}, \frac{-5}{13}, \frac{10}{-26}$

28-30. Answers may vary. Samples are given.

28. $\frac{-2}{8}$

29. $\frac{8}{8}$

30. -0.5

31. $\frac{4}{5}$

32. $-\frac{2}{27}$

33. $-\frac{1}{4}$

34. $\frac{3}{4}$

35. $\frac{8}{9}$

36. $\frac{5}{7}$

37. D

38. a. Answers may vary. Sample: $\frac{1}{3}, \frac{1}{4}$

b. Infinitely many. Between any two rational numbers, you can find another rational number.

39. Answers may vary. Sample: $\frac{-a}{-b}$, $\frac{2a}{2b}$, and $\frac{-2a}{-2b}$ all simplify to $\frac{a}{b}$ so they are equivalent to $\frac{a}{b}$.

40. 64

41. Whole numbers are integers because the integers include all the whole numbers and their opposites. Integers are rational numbers because you can write any integer as itself divided by 1.

42. $-\frac{2}{3}, \frac{2}{3}$

43. $\frac{5}{6}, \frac{5}{6}$

44. $\frac{4}{5}, \frac{4}{5}$

45. $\frac{2}{7}, \frac{2}{7}$

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

47. $\frac{a}{b}, \frac{a}{b}$

48. Not always true; for $a = 1$, $\frac{1^2}{1} = \frac{1}{1}$

49. always true

50. Not always true; for $a = 1 = b$, $\frac{1^2}{1^2} = \frac{1}{1}$