

Chapter 2 Review

(2.1) Determine whether each number is an improper fraction, a proper fraction, or a mixed number.

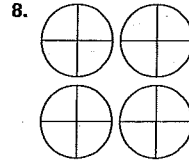
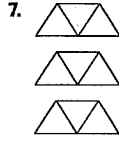
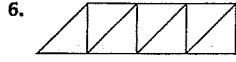
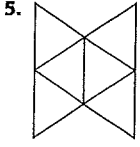
1. $\frac{11}{23}$

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

3. $\frac{1}{2}$

4. $2\frac{1}{4}$

Write a fraction to represent the shaded area.



9. A basketball player made 11 free throws out of 12 during a game. What fraction of free throws did the player make?

10. A new car lot contained 23 blue cars out of a total of 131 cars.

- a. How many cars on the lot are not blue?
- b. What fraction of cars on the lot are not blue?

Write each improper fraction as a mixed number or a whole number.

11. $\frac{15}{4}$

12. $\frac{275}{6}$

13. $\frac{39}{13}$

14. $\frac{60}{12}$

Write each mixed number as an improper fraction.

15. $1\frac{1}{5}$

16. $1\frac{1}{21}$

17. $2\frac{8}{9}$

18. $3\frac{11}{12}$

(2.2) Identify each number as prime or composite.

19. 51

20. 17

List all factors of each number.

21. 42

22. 20

Find the prime factorization of each number.

23. 68

24. 90

25. 785

26. 255

(2.3) Write each fraction in simplest form.

27. $\frac{12}{28}$

28. $\frac{15}{27}$

29. $\frac{25}{75}$

30. $\frac{36}{72}$

31. $\frac{29}{32}$

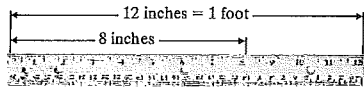
32. $\frac{18}{23}$

33. $\frac{48}{6}$

34. $\frac{54}{9}$

Solve.

35. There are 12 inches in a foot. What fractional part of a foot does 8 inches represent?



36. Six out of 15 cars are white. What fraction of the cars are *not* white?

Determine whether each two fractions are equivalent.

37. $\frac{10}{34}$ and $\frac{4}{14}$

38. $\frac{30}{50}$ and $\frac{9}{15}$

(2.4) Multiply. Write each answer in simplest form. Estimate where noted.

39. $\frac{3}{5} \cdot \frac{1}{2}$

40. $\frac{6}{7} \cdot \frac{5}{12}$

41. $\frac{24}{5} \cdot \frac{15}{8}$

42. $\frac{27}{21} \cdot \frac{7}{18}$

43. $5 \cdot \frac{7}{8}$

44. $6 \cdot \frac{5}{12}$

45. $\frac{39}{3} \cdot \frac{7}{13} \cdot \frac{5}{21}$

46. $\frac{42}{5} \cdot \frac{15}{6} \cdot \frac{7}{9}$

47. $1\frac{5}{8} \cdot 3\frac{1}{5}$

48. $3\frac{6}{11} \cdot 1\frac{7}{13}$

49. $\frac{3}{4} \cdot 8 \cdot 4\frac{1}{8}$

50. $2\frac{1}{9} \cdot 3 \cdot \frac{1}{38}$

Exact:

Exact:

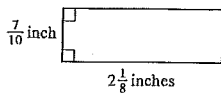
Estimate:

Estimate:

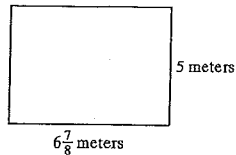
51. There are $7\frac{1}{3}$ grams of fat in each ounce of hamburger. How many grams of fat are in a 5-ounce hamburger patty?

52. An art teacher needs 45 pieces of PVC piping for an art project. If each piece needs to be $\frac{3}{4}$ inch long, find the total length of piping she needs.

△ 53. Find the area of each rectangle,



△ 54.



(2.5) Find the reciprocal of each number.

55. 7

56. $\frac{1}{8}$

57. $\frac{14}{23}$

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

Divide. Write each answer in simplest form.

59. $\frac{3}{4} \div \frac{3}{8}$

60. $\frac{21}{4} \div \frac{7}{5}$

61. $\frac{5}{3} \div 2$

62. $5 \div \frac{15}{8}$

63. $6\frac{3}{4} \div 1\frac{2}{7}$

64. $5\frac{1}{2} \div 2\frac{1}{11}$

65. A truck traveled 341 miles on $15\frac{1}{2}$ gallons of gas. How many miles might we expect the truck to travel on 1 gallon of gas?

66. Herman Heltznutt walks 5 days a week for a total distance of $5\frac{1}{4}$ miles per week. If he walks the same distance each day, find the distance he walks each day.

Mixed Review

Determine whether each number is an improper fraction, a proper fraction, or a mixed number.

67. $\frac{0}{3}$

68. $\frac{12}{12}$

69. $5\frac{6}{7}$

70. $\frac{13}{9}$

Write each improper fraction as a mixed number or a whole number. Write each mixed number as an improper fraction.

71. $\frac{125}{4}$

72. $\frac{54}{9}$

73. $5\frac{10}{17}$

74. $7\frac{5}{6}$

Identify each number as prime or composite.

75. 27

76. 23

Find the prime factorization of each number.

77. 180

78. 98

Write each fraction in simplest form.

79. $\frac{45}{50}$

80. $\frac{30}{42}$

81. $\frac{140}{150}$

82. $\frac{84}{140}$

Multiply or divide as indicated. Write each answer in simplest form. Estimate where noted.

83. $\frac{7}{8} \cdot \frac{2}{3}$

84. $\frac{6}{15} \cdot \frac{5}{8}$

85. $\frac{18}{5} \div \frac{2}{5}$

86. $\frac{9}{2} \div \frac{1}{3}$

87. $4\frac{1}{6} \cdot 2\frac{2}{5}$

88. $5\frac{2}{3} \cdot 2\frac{1}{4}$

89. $\frac{7}{2} \div 1\frac{1}{2}$

90. $1\frac{3}{5} \div \frac{1}{4}$

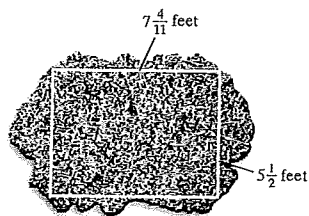
Exact:

Exact:

Estimate:

Estimate:

- △ 91. A slab of natural granite is purchased and a rectangle with length $7\frac{4}{11}$ feet and width $5\frac{1}{2}$ feet is cut from it. Find the area of the rectangle.



92. An area of Mississippi received $23\frac{1}{2}$ inches of rain in $30\frac{1}{2}$ hours. How many inches per 1 hour is this?