TEST BANK

# Contemporary Mathematics

## FOR BUSINESS AND CONSUMERS

Robert Brechner • 6e

# CHAPTER 2 TEST--FRACTIONS

*Student:* _____

1. A mathematical way of expressing a part of a whole thing is called a(n) _____.

   _____

2. The number on the bottom of the division line of a fraction is called the _____.

   _____

3. A fraction in which the numerator is smaller than the denominator is called a(n) _____.

   _____

4. The number on the top of the division line of a fraction is called the _____.

   _____

5. A(n) _____ combines a whole number with a proper fraction.

   _____

6. The least common denominator is the _____, and therefore most efficient, common denominator in addition or subtraction of fractions.

   _____

7. A whole number divisible only by itself and l is called a(n) _____.

   _____

8. Proper fractions that have the same denominator in addition or subtraction are called _____ fractions.

   _____

9. Inverted numbers are known as _____ of each other.

   _____

10. In division of fractions, the _____ is inverted.

    _____

11. A useful shortcut which simplifies the multiplication of fractions is called _____.

    _____

12. Identify the type of fraction and written word form: $\frac{10}{3}$

    A. Proper fraction, ten-thirds
    B. Improper fraction, ten-thirds
    C. Improper fraction, ten-threes
    D. Proper fraction, ten-threes

13. Identify the type of fraction and written word form: $24\frac{19}{20}$

    A. Proper fraction, twenty-four and nineteen-twentieths
    B. Improper fraction, twenty-four and nineteen-twentieths
    C. Mixed number, twenty-four and nineteen-twentieths
    D. Mixed number, twenty-four and nineteen-twenties

14. Identify the type of fraction and written word form: $\frac{7}{30}$

    A. proper fraction; seven-thirtieths
    B. mixed number; seven-thirtieths
    C. improper fraction; seven-thirtieths
    D. proper fraction; seven thirty

15. Identify the type of fraction and written word form: $\frac{43}{10}$

    A. improper fraction; forty-three ten
    B. proper fraction; forty-three-tenths
    C. improper fraction; forty-three-tenths
    D. mixed number; forty-three-tenths

16. Convert the following improper fraction to a whole number or a mixed number: $\frac{131}{16}$

A. 8
B. $8\frac{3}{16}$
C. $\frac{131}{16}$
D. $\frac{65}{8}$

17. Convert the following improper fraction to a whole number or a mixed number: $\frac{80}{8}$

A. $\frac{1}{7}$
B. 77
C. 100
D. 10

18. Convert the following improper fraction to a whole number or a mixed number: $\frac{41}{6}$

A. $6\frac{5}{6}$
B. 6.83
C. $6\frac{2}{3}$
D. 7

19. Convert the following mixed number to an improper fraction: $13\frac{5}{6}$

A. $\frac{78}{6}$

B. $\frac{73}{6}$

C. $\frac{83}{6}$

D. $\frac{83}{5}$

20. Convert the following mixed number to an improper fraction: $9\frac{5}{14}$

A. $\frac{126}{14}$

B. $\frac{131}{14}$

C. $\frac{121}{14}$

D. $\frac{3}{14}$

21. Convert the following mixed number to an improper fraction: $12\frac{3}{4}$

A. $\frac{123}{4}$

B. $12\frac{3}{4}$

C. $\frac{36}{4}$

D. $\frac{51}{4}$

22. Convert the fraction to higher terms. Enter the value of the missing denominator: $\frac{2}{3} = \frac{14}{\quad}$

A. 21
B. 28
C. 42
D. 78

23. Reduce the fraction to lowest terms: $\frac{9}{17}$

A. $1\frac{8}{17}$

B. $\frac{9}{17}$

C. $\frac{3}{5}$

D. $\frac{3}{6}$

24. Reduce the following fraction to lowest terms: $\frac{6}{78}$

A. $\frac{3}{78}$

B. $\frac{6}{78}$

C. $\frac{3}{39}$

D. $\frac{1}{13}$

25. Convert the following improper fraction to a whole number or a mixed number: $\frac{169}{13}$

A. 13
B. $13\frac{1}{8}$

C. $\frac{131}{16}$

D. $\frac{65}{8}$

26. Convert the fraction to higher terms. Enter the value of the missing numerator: $\frac{5}{13} = \frac{?}{78}$

A. 6
B. 15
C. 30
D. 11

27. Convert the fraction to higher terms. Enter the value of the missing numerator: $\frac{3}{13} = \frac{?}{78}$

A. 9
B. 3
C. 18
D. 27

28. Convert the fraction to higher terms. Enter the value of the missing numerator: $\frac{1}{4} = \frac{?}{84}$

A. 14
B. 21
C. 42
D. 84

29. Find the least common denominator of the fractions: $\frac{1}{8}, \frac{17}{18}, \frac{1}{16}, \frac{9}{14}$

A. 32,256
B. 1008
C. 18
D. 288

30. Find the least common denominator of the fractions: $\frac{7}{8}, \frac{1}{18}, \frac{7}{12}, \frac{11}{16}$

A. 154
B. 18
C. 144
D. 27,648

31. Find the least common denominator of the fractions: $\frac{5}{8}, \frac{1}{18}, \frac{5}{9}, \frac{9}{14}$

A. 49
B. 18
C. 8
D. 504

32. Find the least common denominator of the fractions: $\frac{1}{8}, \frac{4}{5}, \frac{11}{14}, \frac{11}{10}$

A. 504
B. 280
C. 39
D. 560

33. Add and show as reduced mixed number or proper fraction: $\frac{1}{8} + \frac{7}{8} + \frac{7}{8} =$

A. $\frac{15}{8}$

B. $1\frac{7}{8}$

C. $\frac{15}{24}$

D. $1\frac{15}{8}$

34. Verna shipped three packages to Chicago. If the packages weighed $12\frac{1}{2}$, $35\frac{1}{4}$, and $41\frac{7}{20}$, what was the total weight?

A. $89\frac{1}{10}$

B. $87\frac{7}{10}$

C. $84\frac{13}{20}$

D. $89\frac{19}{20}$

35. Lee shipped three packages to New York. If the packages weighed $27\frac{1}{6}$, $40\frac{1}{3}$, and $10\frac{5}{6}$ pounds, what was the total weight?

A. $72\frac{11}{10}$

B. 73

C. $78\frac{1}{3}$

D. $72\frac{1}{10}$

36. Subtract and reduce: $\frac{14}{15} - \frac{4}{9} =$

A. $1\frac{15}{45}$

B. $\frac{10}{15}$

C. $\frac{22}{45}$

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

37. Multiply and reduce the following: $\frac{2}{4} \times \frac{2}{8} =$

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

B. $\frac{1}{6}$

C. $\frac{4}{32}$

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

38. Multiply and reduce the following: $\frac{5}{6} \times \frac{3}{5} \times \frac{1}{7} =$

A. $\frac{15}{210}$

B. $\frac{15}{18}$

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

D. $\frac{1}{14}$

39. A panel measures $5\frac{2}{5}$ yards long by $7\frac{4}{5}$ yards wide. What is the area of the panel? (Multiply length times width.)

A. $42\frac{3}{25}$

B. $35\frac{1}{5}$

C. $41\frac{3}{5}$

D. $34\frac{4}{25}$

40. Multiply and reduce: $\frac{4}{5} \times \frac{10}{15} =$

A. $\frac{40}{75}$

B. $\frac{7}{10}$

C. $\frac{8}{15}$

D. $\frac{4}{7}$

41. Divide the following fractions and reduce to lowest terms: $\frac{2}{3} \div \frac{4}{5} =$

A. $\frac{6}{15}$

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

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

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

42. Divide the following fractions and reduce to lowest terms: $3 \div \frac{3}{4} =$

A. 4
B. $5\frac{1}{4}$

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

D. $\frac{9}{12}$

43. Divide and reduce: $\frac{7}{12} \div \frac{12}{16} =$

A. $\frac{84}{160}$

B. $\frac{7}{9}$

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

D. $\frac{21}{40}$

44. Divide and reduce: $\frac{12}{14} \div \frac{10}{12} =$

A. $\frac{120}{168}$

B. $\frac{36}{14}$

C. $\frac{18}{7}$

D. $1\frac{1}{35}$

45. Convert the following improper fraction to a whole number or a mixed number: $\frac{55}{5}$

A. $11\frac{1}{5}$

B. $55\frac{1}{5}$

C. $11\frac{5}{5}$

D. 11

46. Reduce the fraction: $\frac{13}{15}$

A. $1\frac{2}{15}$

B. $\frac{3}{5}$

C. $\frac{13}{15}$

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

47. Reduce the following fraction to lowest terms: $\frac{16}{84}$

A. $\frac{8}{42}$

B. $\frac{1}{6}$

C. $\frac{2}{24}$

D. $\frac{4}{21}$

48. Convert the fraction to a higher term, as indicated: $\frac{5}{8}$ to thousands

A. $\frac{375}{1000}$

B. $\frac{625}{1000}$

C. $\frac{525}{1000}$

D. $\frac{825}{1000}$

49. Add and reduce: $4\frac{3}{7}+2\frac{5}{9}+4+\frac{2}{3}=$

A. $11\frac{1}{3}$

B. $12\frac{5}{7}$

C. $12\frac{5}{63}$

D. $11\frac{41}{63}$

50. Subtract and reduce the following: $\frac{1}{9}-\frac{1}{10}=$

A. $\frac{1}{10}$

B. $\frac{1}{90}$

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

D. 1

51. Identify the type of fraction and written word form: $5\frac{33}{10}$

A. improper fraction; thirty-three ten
B. proper fraction; thirty-three-tenths
C. improper fraction; five and ten-thirty-thirds
D. mixed number; five and thirty-three-tenths

52. Convert the following mixed number to an improper fraction: $14\frac{3}{16}$

A. $\frac{123}{16}$

B. $\frac{227}{16}$

C. $5\frac{123}{16}$

D. $\frac{51}{4}$

53. Divide the following fractions and reduce to lowest terms: $\frac{8}{15}$ divided by $\frac{16}{30}$

A. 1
B. $\frac{15}{16}$

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

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

54. Identify the type of fraction, and write it in word form: $33\frac{3}{8}$

55. Identify the type of fraction, and write it in word form: $\frac{5}{17}$

56. Identify the type of fraction, and write it in word form: $\frac{12}{12}$

57. Convert the improper fraction to a whole or mixed number: $\frac{92}{16}$

58. Convert the improper fraction to a whole or mixed number: $\frac{9}{4}$

59. Convert the improper fraction to a whole or mixed number: $\frac{35}{6}$

60. Convert the improper fraction to a whole or mixed number: $\frac{56}{11}$

61. Convert the mixed number to an improper fraction: $8\frac{5}{6}$

62. Convert the mixed number to an improper fraction: $8\frac{1}{4}$

63. Convert the mixed number to an improper fraction: $3\frac{2}{9}$

64. Convert the mixed number to an improper fraction: $16\frac{1}{2}$

65. Reduce the fraction to lowest: $\frac{84}{161}$

66. Reduce the fraction to lowest: $\frac{252}{810}$

67. Reduce the fraction to lowest: $\frac{33}{132}$

68. Convert the fraction to a higher term, as indicated: $\frac{3}{7}$ to forty-ninths

69. Convert the fraction to a higher term, as indicated: $\frac{5}{9}$ to thirty-sixths

70. Convert the fraction to a higher term, as indicated: $\frac{4}{5}$ to hundreds

71. Convert the fraction to a higher term, as indicated: $\frac{1}{2}$ to eighths

72. Convert the fraction to a higher term, as indicated: $\frac{1}{9} = \frac{?}{63}$

73. Convert the fraction to a higher term, as indicated: $\frac{5}{18} = \frac{?}{468}$

74. Convert the improper fraction to a whole or mixed number: $\frac{9}{5}$

75. Convert the fraction to a higher term, as indicated: $\frac{13}{16} = \frac{?}{7,200}$

76. Find the least common denominator for the fraction: $\frac{2}{3}, \frac{3}{5}, \frac{6}{15}$

77. Find the least common denominator for the fraction: $\frac{5}{7}, \frac{1}{4}, \frac{2}{9}, \frac{2}{3}$

78. Find the least common denominator for the fraction: $\frac{16}{25}, \frac{1}{3}, \frac{62}{75}, \frac{19}{20}$

79. Add the fraction, and reduce to lowest terms: $\frac{2}{3} + \frac{1}{4} =$

80. Add the fraction, and reduce to lowest terms: $\frac{9}{16} + \frac{17}{32} =$

81. Add the fraction, and reduce to lowest terms: $\frac{5}{12} + \frac{22}{30} + \frac{14}{15} =$

82. Add the fraction, and reduce to lowest terms: $5\frac{1}{2}+2\frac{3}{8}+\frac{1}{4}=$

83. Add the fraction, and reduce to lowest terms: $6\frac{2}{7}+13\frac{4}{28}=$

84. Add the fraction, and reduce to lowest terms: $2\frac{1}{2}+3\frac{2}{3}=$

85. Subtract the fraction and reduce to lowest terms: $\frac{5}{6} - \frac{10}{24} =$

86. Subtract the fraction and reduce to lowest terms: $\frac{8}{9} - \frac{21}{27} =$

87. Subtract the fraction and reduce to lowest terms: $42\frac{5}{8} - 6\frac{1}{3} =$

88. Subtract the fraction and reduce to lowest terms: $18\frac{2}{5} - \frac{11}{15} =$

89. Subtract the fraction and reduce to lowest terms: $89 - 6\frac{2}{3} =$

90. Multiply the fraction and reduce to lowest terms: $\frac{5}{8} \times \frac{2}{3} =$

91. Multiply the fraction and reduce to lowest terms: $\frac{24}{52} \times \frac{1}{6} =$

92. Multiply the fraction and reduce to lowest terms: $\frac{1}{2} \times \frac{10}{22} \times 2 =$

93. Multiply the fraction and reduce to lowest terms: $6\frac{3}{8} \times \frac{24}{7} =$

94. Multiply the fraction and reduce to lowest terms: $4\frac{3}{8} \times \frac{2}{5} =$

95. Multiply the fraction and reduce to lowest terms: $16 \times \frac{5}{9} \times 2\frac{1}{2} =$

96. Divide the fraction and reduce to lowest terms: $\frac{1}{5} \div \frac{1}{6} =$

97. Divide the fraction and reduce to lowest terms: $\frac{11}{24} \div \frac{1}{2} =$

98. Divide the fraction and reduce to lowest terms: $4 \div \frac{5}{6} =$

99. Divide the fraction and reduce to lowest terms: $1\frac{1}{9} \div \frac{2}{3} =$

100. Divide the fraction and reduce to lowest terms: $\frac{26}{55} \div 18 =$

101. Divide the fraction and reduce to lowest terms: $6\frac{1}{8} \div 1\frac{3}{4} =$

102. After a party Duncan noticed that $\frac{3}{8}$ of a pizza was left over. What fractional part of the pizza was eaten?

103.Convert the improper fraction to a whole or mixed number: $\frac{88}{5}$

104.Convert the fraction to a higher term, as indicated: $\frac{3}{7}$ to sixty-thirds

105.Convert the mixed number to an improper fraction: $13\frac{5}{6}$

106. What type of fraction is $\frac{40}{13}$? How would you write this fraction in word form?

107. Convert $\frac{13}{2}$ to a whole or mixed number and write it in words.

108. Steph is following a recipe that calls for $4\frac{2}{3}$ pounds of chicken. She would like to increase the serving size and will have to change all the measurements. Before Steph can change the measurements, she must convert the mixed number to an improper fraction. What should be the improper fraction for the chicken measurement?

109. At the end of the semester, 25 of the 32 students who started an accounting course remained. What fraction represents the total number of students who dropped the course?

110. Rennata shipped three packages to West Virginia. If the packages weighed $14\frac{3}{4}$, $9\frac{1}{6}$, and $24\frac{1}{3}$ pounds, what was the total weight of Rennata's shipment?

111. A plumber cut pieces of pipe with the following measurements: $\frac{5}{18}$, $\frac{15}{16}$, $\frac{7}{8}$, $\frac{5}{12}$

Find the least common denominator.

112. Price is working at the local Jiffy Lube and during his shift used the following cases of oil on his jobs: $2\frac{1}{3}$, $1\frac{5}{6}$, $3\frac{2}{3}$, and $4\frac{4}{9}$

How many cases in total did Price use?

113. Adolia Hunter walked $1\frac{1}{5}$ miles on Monday, $4\frac{3}{4}$ miles on Wednesday and $2\frac{1}{3}$ miles on Friday. How many total miles did she walk?

114. A good planting soil is made up of $9\frac{1}{4}$ pounds of dirt and $3\frac{3}{8}$ pounds of cow manure. How much will the mixture weigh afterwards?

115. Ruby and some friends are on a road trip that will take a total of $48\frac{1}{3}$ miles. If Ruby and her friends have already traveled $25\frac{4}{9}$ miles, how many are left?

116. Peter Williams sold $41\frac{1}{4}$ acres of his $55\frac{7}{8}$ acre ranch. How many acres does Peter have left?

117. Moriah bought $41\frac{4}{15}$ pounds of fertilizer but only used $21\frac{1}{5}$ pounds in her garden. How much fertilizer does she have left?

118. Turner Morris weighs $1\frac{3}{4}$ times as much as his sister. If his sister weighs 84 pounds, how much does Turner weigh?

119. A foundation requires $2\frac{1}{2}$ truckloads of concrete. If the concrete truck holds $3\frac{1}{5}$ cubic yards of concrete, how many total cubic yards of concrete are used for the foundation?

120. Four surveys taken to assess HD television viewers buying patterns has the following results: $\frac{6}{9}, \frac{4}{6}, \frac{4}{8}, \frac{2}{10}$. In order to find a grand total, these results must be multiplied. What is the grand total of the survey taken?

121. How many $3\frac{1}{3}$ feet pieces of wire can be cut from a piece 68 feet long?

122. Jeremiag Thompson owns $118\frac{3}{4}$ acres of undeveloped land. If the property is divided into $1\frac{1}{4}$ acre pieces, how many homesites can be developed?

123. A novelty shop buys beads in bulk from the manufacturer and packages them into $1\frac{4}{5}$ pound boxes. How many boxes can be filled from 828 pounds of beads?

124. Eastern Mining Co. mines $7\frac{5}{6}$ tons of coal on Monday, $6\frac{7}{8}$ tons on Tuesday, and $12\frac{5}{12}$ tons on Wednesday. If their goal is to mine 40 tons this week, how many more tons must be mined?

125. Cicely Bosley borrowed $21,600 from the bank. She has repaid $\frac{2}{3}$ of the loan. What is the remaining balance owed to the bank?

126. A recent poll showed that 60 of the 540 people interviewed preferred decaffeinated coffee over regular. What fraction of the people preferred regular coffee?

127. Chris Spencer increased his earnings by $\frac{2}{3}$ from last year. If he made $36,480 last year, how much did he make this year?

128. Sunny can assemble $2\frac{1}{4}$ circuit boards in one hour. Astrid can assemble $3\frac{1}{5}$ in one hour. In an 8-hour shift, how many more circuit boards does Astrid assemble than Sunny?

129. Three heirs share an estate of $340,000. Jordan receives $\frac{3}{8}$, Danielle receives $\frac{2}{5}$, and Samuel receives the balance. How much does Samuel receive?

130. A recipe for a meat casserole calls for $4\frac{1}{2}$ tablespoons of minced garlic. If this recipe serves 8 people, recalculate the amount of garlic needed to serve 6 people.

131. Cosmos Company uses $3\frac{1}{7}$ square yards of material to make a slip cover for a chair. The material comes in 1,100 square yard rolls that cost $10,150 each.

a. How many slip covers can be made from each roll?
b. What is the cost of each slip cover?

132. A building has a total area of 20,880 square feet. At the present time, the assembly area occupies $\frac{2}{5}$ of the space, the storage area occupies $\frac{1}{6}$ of the area, and the office occupies the balance of the space.

a. How many square feet of space does the office occupy?
b. If the company wants to increase the size of the assembly area by $\frac{1}{3}$, how many square feet will the assembly area have?

133. A roll of material is 257 yards long. Janet Barnett cut $9\frac{3}{4}$, $24\frac{1}{12}$, and $22\frac{1}{6}$ yards from the roll.

a. How much material did Janet cut from the roll?
b. How much material was left on the roll?

134.Jasmine Jackson sold $22\frac{1}{4}$ acres of her $76\frac{7}{8}$ acre ranch. How many acres does Jasmine have left?

135.Rod Harris earns $180 per day. On Monday, he only worked $\frac{7}{8}$ of a day. How much did Rod earn?

136.If a stone cutter has $\frac{3}{4}$ of an ounce of a precious stone and it takes $\frac{1}{8}$ ounce of that stone to make one ring. How many rings can the stone cutter make from the precious stone that he has?

137. A recent poll showed that 54 of the 620 people interviewed preferred non-alcoholic beer over regular. What fraction of the people preferred regular beer?

138. During the week Ivey earned $\frac{1}{4}$ and $\frac{1}{3}$ of her monthly bonus on two sales transactions. If those bonuses amounted to $840.00, how much was her monthly bonus?

139. A tailor needs $3\frac{1}{2}$ yards of cloth in order to make a jacket. He needs $2\frac{5}{8}$ yards in order to make the slacks to complete the suit. If he makes four suits, how much cloth will he need?

140. A board is $9\frac{3}{4}$ feet in length. A carpenter intends to cut blocks from that board of $1\frac{5}{8}$ feet in length.

How many full sizes pieces can be cut from that board of wood?

141. At the end of the semester, 14 of the 29 students who started a Physics course remained. What fraction represents the total number of students who dropped the course?

# CHAPTER 2 TEST--FRACTIONS Key

1. A mathematical way of expressing a part of a whole thing is called a(n) _____.

   **fraction**

2. The number on the bottom of the division line of a fraction is called the _____.

   **denominator**

3. A fraction in which the numerator is smaller than the denominator is called a(n) _____.

   **common fraction** *or*
   **proper fraction**

4. The number on the top of the division line of a fraction is called the _____.

   **numerator**

5. A(n) _____ combines a whole number with a proper fraction.

   **mixed number**

6. The least common denominator is the _____, and therefore most efficient, common denominator in addition or subtraction of fractions.

   **smallest**

7. A whole number divisible only by itself and l is called a(n) _____.

   **prime number**

8. Proper fractions that have the same denominator in addition or subtraction are called _____ fractions.

   **like**

9. Inverted numbers are known as _____ of each other.

   **reciprocals**

10. In division of fractions, the _____ is inverted.

    **divisor**

11. A useful shortcut which simplifies the multiplication of fractions is called _____.

**cancellation**

12. Identify the type of fraction and written word form: $\frac{10}{3}$

A. Proper fraction, ten-thirds
**B.** Improper fraction, ten-thirds
C. Improper fraction, ten-threes
D. Proper fraction, ten-threes

13. Identify the type of fraction and written word form: $24\frac{19}{20}$

A. Proper fraction, twenty-four and nineteen-twentieths
B. Improper fraction, twenty-four and nineteen-twentieths
**C.** Mixed number, twenty-four and nineteen-twentieths
D. Mixed number, twenty-four and nineteen-twenties

14. Identify the type of fraction and written word form: $\frac{7}{30}$

**A.** proper fraction; seven-thirtieths
B. mixed number; seven-thirtieths
C. improper fraction; seven-thirtieths
D. proper fraction; seven thirty

15. Identify the type of fraction and written word form: $\frac{43}{10}$

A. improper fraction; forty-three ten
B. proper fraction; forty-three-tenths
**C.** improper fraction; forty-three-tenths
D. mixed number; forty-three-tenths

16. Convert the following improper fraction to a whole number or a mixed number: $\frac{131}{16}$

A. 8
**B.** $8\frac{3}{16}$

C. $\frac{131}{16}$

D. $\frac{65}{8}$

17. Convert the following improper fraction to a whole number or a mixed number: $\frac{80}{8}$

A. $\frac{1}{7}$

B. 77
C. 100
**D.** 10

18. Convert the following improper fraction to a whole number or a mixed number: $\frac{41}{6}$

**A.** $6\frac{5}{6}$

B. 6.83
C. $6\frac{2}{3}$

D. 7

19. Convert the following mixed number to an improper fraction: $13\frac{5}{6}$

A. $\frac{78}{6}$

B. $\frac{73}{6}$

**C.** $\frac{83}{6}$

D. $\frac{83}{5}$

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A. $\frac{126}{14}$

**B.** $\frac{131}{14}$

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21. Convert the following mixed number to an improper fraction: $12\frac{3}{4}$

A. $\frac{123}{4}$

B. $12\frac{3}{4}$

C. $\frac{36}{4}$

**D.** $\frac{51}{4}$

22. Convert the fraction to higher terms. Enter the value of the missing denominator: $\frac{2}{3} = \frac{14}{\quad}$

**A.** 21
B. 28
C. 42
D. 78

23. Reduce the fraction to lowest terms: $\frac{9}{17}$

A. $1\frac{8}{17}$

**B.** $\frac{9}{17}$

C. $\frac{3}{5}$

D. $\frac{3}{6}$

24. Reduce the following fraction to lowest terms: $\frac{6}{78}$

A. $\frac{3}{78}$

B. $\frac{6}{78}$

C. $\frac{3}{39}$

**D.** $\frac{1}{13}$

25. Convert the following improper fraction to a whole number or a mixed number: $\frac{169}{13}$

**A.** 13
B. $13\frac{1}{8}$

C. $\frac{131}{16}$

D. $\frac{65}{8}$

26. Convert the fraction to higher terms. Enter the value of the missing numerator: $\frac{5}{13} = \frac{?}{78}$

A. 6
B. 15
**C.** 30
D. 11

27. Convert the fraction to higher terms. Enter the value of the missing numerator: $\frac{3}{13} = \frac{?}{78}$

A. 9
B. 3
**C.** 18
D. 27

28. Convert the fraction to higher terms. Enter the value of the missing numerator: $\frac{1}{4} = \frac{?}{84}$

A. 14
**B.** 21
C. 42
D. 84

29. Find the least common denominator of the fractions: $\frac{1}{8}, \frac{17}{18}, \frac{1}{16}, \frac{9}{14}$

A. 32,256
**B.** 1008
C. 18
D. 288

30. Find the least common denominator of the fractions: $\frac{7}{8}, \frac{1}{18}, \frac{7}{12}, \frac{11}{16}$

A. 154
B. 18
**C.** 144
D. 27,648

31. Find the least common denominator of the fractions: $\frac{5}{8}, \frac{1}{18}, \frac{5}{9}, \frac{9}{14}$

A. 49
B. 18
C. 8
**D.** 504

32. Find the least common denominator of the fractions: $\frac{1}{8}, \frac{4}{5}, \frac{11}{14}, \frac{11}{10}$

A. 504
**B.** 280
C. 39
D. 560

33. Add and show as reduced mixed number or proper fraction: $\frac{1}{8} + \frac{7}{8} + \frac{7}{8} =$

A. $\frac{15}{8}$

**B.** $1\frac{7}{8}$

C. $\frac{15}{24}$

D. $1\frac{15}{8}$

34. Verna shipped three packages to Chicago. If the packages weighed $12\frac{1}{2}$, $35\frac{1}{4}$, and $41\frac{7}{20}$, what was the total weight?

**A.** $89\frac{1}{10}$

B. $87\frac{7}{10}$

C. $84\frac{13}{20}$

D. $89\frac{19}{20}$

35. Lee shipped three packages to New York. If the packages weighed $27\frac{1}{6}$, $40\frac{1}{3}$, and $10\frac{5}{6}$ pounds, what was the total weight?

A. $72\frac{11}{10}$

B. 73

**C.** $78\frac{1}{3}$

D. $72\frac{1}{10}$

36. Subtract and reduce: $\frac{14}{15} - \frac{4}{9} =$

A. $1\frac{15}{45}$

B. $\frac{10}{15}$

**C.** $\frac{22}{45}$

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

37. Multiply and reduce the following: $\frac{2}{4} \times \frac{2}{8} =$

**A.** $\frac{1}{8}$

B. $\frac{1}{6}$

C. $\frac{4}{32}$

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

38. Multiply and reduce the following: $\frac{5}{6} \times \frac{3}{5} \times \frac{1}{7} =$

A. $\frac{15}{210}$

B. $\frac{15}{18}$

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

**D.** $\frac{1}{14}$

39. A panel measures $5\frac{2}{5}$ yards long by $7\frac{4}{5}$ yards wide. What is the area of the panel? (Multiply length times width.)

**A.** $42\frac{3}{25}$

B. $35\frac{1}{5}$

C. $41\frac{3}{5}$

D. $34\frac{4}{25}$

40. Multiply and reduce: $\frac{4}{5} \times \frac{10}{15} =$

A. $\frac{40}{75}$

B. $\frac{7}{10}$

**C.** $\frac{8}{15}$

D. $\frac{4}{7}$

41. Divide the following fractions and reduce to lowest terms: $\frac{2}{3} \div \frac{4}{5} =$

A. $\frac{6}{15}$

**B.** $\frac{5}{6}$

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

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

42. Divide the following fractions and reduce to lowest terms: $3 \div \frac{3}{4} =$

**A.** 4

B. $5\frac{1}{4}$

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

D. $\frac{9}{12}$

43. Divide and reduce: $\frac{7}{12} \div \frac{12}{16} =$

A. $\frac{84}{160}$

**B.** $\frac{7}{9}$

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

D. $\frac{21}{40}$

44. Divide and reduce: $\frac{12}{14} \div \frac{10}{12} =$

A. $\frac{120}{168}$

B. $\frac{36}{14}$

C. $\frac{18}{7}$

**D.** $1\frac{1}{35}$

45. Convert the following improper fraction to a whole number or a mixed number: $\frac{55}{5}$

A. $11\frac{1}{5}$

B. $55\frac{1}{5}$

C. $11\frac{5}{5}$

**D.** 11

46. Reduce the fraction: $\frac{13}{15}$

A. $1\frac{2}{15}$

B. $\frac{3}{5}$

**C.** $\frac{13}{15}$

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

47. Reduce the following fraction to lowest terms: $\frac{16}{84}$

A. $\frac{8}{42}$

B. $\frac{1}{6}$

C. $\frac{2}{24}$

**D.** $\frac{4}{21}$

48. Convert the fraction to a higher term, as indicated: $\frac{5}{8}$ to thousands

A. $\frac{375}{1000}$

**B.** $\frac{625}{1000}$

C. $\frac{525}{1000}$

D. $\frac{825}{1000}$

49. Add and reduce: $4\frac{3}{7}+2\frac{5}{9}+4+\frac{2}{3}=$

A. $11\frac{1}{3}$

B. $12\frac{5}{7}$

C. $12\frac{5}{63}$

**D.** $11\frac{41}{63}$

50. Subtract and reduce the following: $\frac{1}{9}-\frac{1}{10}=$

A. $\frac{1}{10}$

**B.** $\frac{1}{90}$

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

D. 1

51. Identify the type of fraction and written word form: $5\frac{33}{10}$

A. improper fraction; thirty-three ten
B. proper fraction; thirty-three-tenths
C. improper fraction; five and ten-thirty-thirds
**D.** mixed number; five and thirty-three-tenths

52. Convert the following mixed number to an improper fraction: $14\frac{3}{16}$

A. $\frac{123}{16}$

**B.** $\frac{227}{16}$

C. $5\frac{123}{16}$

D. $\frac{51}{4}$

53. Divide the following fractions and reduce to lowest terms: $\frac{8}{15}$ divided by $\frac{16}{30}$

**A.** 1

B. $\frac{15}{16}$

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

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

54. Identify the type of fraction, and write it in word form: $33\frac{3}{8}$

mixed number; thirty-three and three-eighths

55. Identify the type of fraction, and write it in word form: $\frac{5}{17}$

proper fraction; five-seventeenths

56. Identify the type of fraction, and write it in word form: $\frac{12}{12}$

improper fraction; twelve-twelfths

57. Convert the improper fraction to a whole or mixed number: $\frac{92}{16}$

$5\frac{3}{4}$

58. Convert the improper fraction to a whole or mixed number: $\frac{9}{4}$

$2\frac{1}{4}$

59. Convert the improper fraction to a whole or mixed number: $\frac{35}{6}$

$5\frac{5}{6}$

60. Convert the improper fraction to a whole or mixed number: $\frac{56}{11}$

$5\frac{1}{11}$

61. Convert the mixed number to an improper fraction: $8\frac{5}{6}$

$\frac{53}{6}$

62. Convert the mixed number to an improper fraction: $8\frac{1}{4}$

$\frac{33}{8}$

63. Convert the mixed number to an improper fraction: $3\frac{2}{9}$

$\frac{29}{9}$

64. Convert the mixed number to an improper fraction: $16\frac{1}{2}$

$\frac{33}{2}$

65. Reduce the fraction to lowest: $\frac{84}{161}$

$\frac{12}{23}$

66. Reduce the fraction to lowest: $\frac{252}{810}$

$\frac{14}{45}$

67. Reduce the fraction to lowest: $\frac{33}{132}$

$\frac{1}{4}$

68. Convert the fraction to a higher term, as indicated: $\frac{3}{7}$ to forty-ninths

$\frac{21}{49}$

69. Convert the fraction to a higher term, as indicated: $\frac{5}{9}$ to thirty-sixths

$\frac{20}{36}$

70. Convert the fraction to a higher term, as indicated: $\frac{4}{5}$ to hundreds

$\frac{80}{100}$

71. Convert the fraction to a higher term, as indicated: $\frac{1}{2}$ to eighths

$\frac{4}{8}$

72. Convert the fraction to a higher term, as indicated: $\frac{1}{9} = \frac{?}{63}$

$\frac{7}{63}$

73. Convert the fraction to a higher term, as indicated: $\frac{5}{18} = \frac{?}{468}$

$\frac{130}{468}$

74. Convert the improper fraction to a whole or mixed number: $\frac{9}{5}$

$1\frac{4}{5}$

75. Convert the fraction to a higher term, as indicated: $\frac{13}{16} = \frac{?}{7,200}$

$\frac{5850}{7200}$

76. Find the least common denominator for the fraction: $\frac{2}{3}, \frac{3}{5}, \frac{6}{15}$

15

77. Find the least common denominator for the fraction: $\frac{5}{7}, \frac{1}{4}, \frac{2}{9}, \frac{2}{3}$

252

78. Find the least common denominator for the fraction: $\frac{16}{25}, \frac{1}{3}, \frac{62}{75}, \frac{19}{20}$

300

79. Add the fraction, and reduce to lowest terms: $\frac{2}{3} + \frac{1}{4} =$

$\frac{11}{12}$

80. Add the fraction, and reduce to lowest terms: $\frac{9}{16} + \frac{17}{32} =$

$1\frac{3}{32}$

81. Add the fraction, and reduce to lowest terms: $\frac{5}{12} + \frac{22}{30} + \frac{14}{15} =$

$2\frac{1}{12}$

82. Add the fraction, and reduce to lowest terms: $5\frac{1}{2} + 2\frac{3}{8} + \frac{1}{4} =$

$8\frac{1}{8}$

83. Add the fraction, and reduce to lowest terms: $6\frac{2}{7} + 13\frac{4}{28} =$

$19\frac{3}{7}$

84. Add the fraction, and reduce to lowest terms: $2\frac{1}{2} + 3\frac{2}{3} =$

$6\frac{1}{6}$

85. Subtract the fraction and reduce to lowest terms: $\frac{5}{6} - \frac{10}{24} =$

$\frac{5}{12}$

86. Subtract the fraction and reduce to lowest terms: $\frac{8}{9} - \frac{21}{27} =$

$\frac{1}{9}$

87. Subtract the fraction and reduce to lowest terms: $42\frac{5}{8} - 6\frac{1}{3} =$

$36\frac{7}{24}$

88. Subtract the fraction and reduce to lowest terms: $18\frac{2}{5} - \frac{11}{15} =$

$17\frac{2}{3}$

89. Subtract the fraction and reduce to lowest terms: $89 - 6\frac{2}{3} =$

$82\frac{1}{3}$

90. Multiply the fraction and reduce to lowest terms: $\frac{5}{8} \times \frac{2}{3} =$

$\frac{5}{12}$

91. Multiply the fraction and reduce to lowest terms: $\frac{24}{52} \times \frac{1}{6} =$

$\frac{1}{13}$

92. Multiply the fraction and reduce to lowest terms: $\frac{1}{2} \times \frac{10}{22} \times 2 =$

$\frac{5}{11}$

93. Multiply the fraction and reduce to lowest terms: $6\frac{3}{8} \times \frac{24}{7} =$

$21\frac{6}{7}$

94. Multiply the fraction and reduce to lowest terms: $4\frac{3}{8} \times \frac{2}{5} =$

$1\frac{3}{4}$

95. Multiply the fraction and reduce to lowest terms: $16 \times \frac{5}{9} \times 2\frac{1}{2} =$

$22\frac{2}{9}$

96. Divide the fraction and reduce to lowest terms: $\frac{1}{5} \div \frac{1}{6} =$

$1\frac{1}{5}$

97. Divide the fraction and reduce to lowest terms: $\frac{11}{24} \div \frac{1}{2} =$

$\frac{11}{12}$

98. Divide the fraction and reduce to lowest terms: $4 \div \frac{5}{6} =$

$4\frac{4}{5}$

99. Divide the fraction and reduce to lowest terms: $1\frac{1}{9} \div \frac{2}{3} =$

$1\frac{2}{3}$

100. Divide the fraction and reduce to lowest terms: $\frac{26}{55} \div 18 =$

$\frac{13}{495}$

101. Divide the fraction and reduce to lowest terms: $6\frac{1}{8} \div 1\frac{3}{4} =$

$3\frac{1}{2}$

102. After a party Duncan noticed that $\frac{3}{8}$ of a pizza was left over. What fractional part of the pizza was eaten?

$\frac{5}{8}$

103. Convert the improper fraction to a whole or mixed number: $\frac{88}{5}$

mixed number; $17\frac{3}{5}$

104. Convert the fraction to a higher term, as indicated: $\frac{3}{7}$ to sixty-thirds

$\frac{27}{63}$

105. Convert the mixed number to an improper fraction: $13\frac{5}{6}$

$\frac{83}{6}$

106. What type of fraction is $\frac{40}{13}$? How would you write this fraction in word form?

improper fraction, forty-thirteenths

107. Convert $\frac{13}{2}$ to a whole or mixed number and write it in words.

$6\frac{1}{2}$, six and one half

108. Steph is following a recipe that calls for $4\frac{2}{3}$ pounds of chicken. She would like to increase the serving size and will have to change all the measurements. Before Steph can change the measurements, she must convert the mixed number to an improper fraction. What should be the improper fraction for the chicken measurement?

$\frac{14}{3}$

109. At the end of the semester, 25 of the 32 students who started an accounting course remained. What fraction represents the total number of students who dropped the course?

$\frac{7}{32}$

110. Rennata shipped three packages to West Virginia. If the packages weighed $14\frac{3}{4}$, $9\frac{1}{6}$, and $24\frac{1}{3}$ pounds, what was the total weight of Rennata's shipment?

$48\frac{1}{4}$

111. A plumber cut pieces of pipe with the following measurements: $\frac{5}{18}$, $\frac{15}{16}$, $\frac{7}{8}$, $\frac{5}{12}$

Find the least common denominator.

144

112. Price is working at the local Jiffy Lube and during his shift used the following cases of oil on his jobs: $2\frac{1}{3}$, $1\frac{5}{6}$, $3\frac{2}{3}$, and $4\frac{4}{9}$

How many cases in total did Price use?

$12\frac{5}{18}$ cases

113. Adolia Hunter walked $1\frac{1}{5}$ miles on Monday, $4\frac{3}{4}$ miles on Wednesday and $2\frac{1}{3}$ miles on Friday. How many total miles did she walk?

$8\frac{17}{60}$ miles

114. A good planting soil is made up of $9\frac{1}{4}$ pounds of dirt and $3\frac{3}{8}$ pounds of cow manure. How much will the mixture weigh afterwards?

$12\frac{5}{8}$ pounds

115. Ruby and some friends are on a road trip that will take a total of $48\frac{1}{3}$ miles. If Ruby and her friends have already traveled $25\frac{4}{9}$ miles, how many are left?

$22\frac{8}{9}$

116. Peter Williams sold $41\frac{1}{4}$ acres of his $55\frac{7}{8}$ acre ranch. How many acres does Peter have left?

$14\frac{5}{8}$ acres

117. Moriah bought $41\frac{4}{15}$ pounds of fertilizer but only used $21\frac{1}{5}$ pounds in her garden. How much fertilizer does she have left?

$20\frac{1}{15}$

118. Turner Morris weighs $1\frac{3}{4}$ times as much as his sister. If his sister weighs 84 pounds, how much does Turner weigh?

147 pounds

119. A foundation requires $2\frac{1}{2}$ truckloads of concrete. If the concrete truck holds $3\frac{1}{5}$ cubic yards of concrete, how many total cubic yards of concrete are used for the foundation?

8 cubic yards

120. Four surveys taken to assess HD television viewers buying patterns has the following results: $\frac{6}{9}, \frac{4}{6}, \frac{4}{8}, \frac{2}{10}$. In order to find a grand total, these results must be multiplied. What is the grand total of the survey taken?

$\frac{2}{45}$

121. How many $3\frac{1}{3}$ feet pieces of wire can be cut from a piece 68 feet long?

$20\frac{2}{5}$

122. Jeremiag Thompson owns $118\frac{3}{4}$ acres of undeveloped land. If the property is divided into $1\frac{1}{4}$ acre pieces, how many homesites can be developed?

95 homesites

123. A novelty shop buys beads in bulk from the manufacturer and packages them into $1\frac{4}{5}$ pound boxes.

How many boxes can be filled from 828 pounds of beads?

460 boxes

124. Eastern Mining Co. mines $7\frac{5}{6}$ tons of coal on Monday, $6\frac{7}{8}$ tons on Tuesday, and $12\frac{5}{12}$ tons on

Wednesday. If their goal is to mine 40 tons this week, how many more tons must be mined?

$12\frac{7}{8}$ tons

125. Cicely Bosley borrowed $21,600 from the bank. She has repaid $\frac{2}{3}$ of the loan. What is the remaining

balance owed to the bank?

$7,200

126. A recent poll showed that 60 of the 540 people interviewed preferred decaffeinated coffee over regular. What fraction of the people preferred regular coffee?

$\frac{8}{9}$

127. Chris Spencer increased his earnings by $\frac{2}{3}$ from last year. If he made $36,480 last year, how much did he make this year?

$60,800

128. Sunny can assemble $2\frac{1}{4}$ circuit boards in one hour. Astrid can assemble $3\frac{1}{5}$ in one hour. In an 8-hour shift, how many more circuit boards does Astrid assemble than Sunny?

$7\frac{3}{5}$ circuit boards

129. Three heirs share an estate of $340,000. Jordan receives $\frac{3}{8}$, Danielle receives $\frac{2}{5}$, and Samuel receives the balance. How much does Samuel receive?

$76,500

130. A recipe for a meat casserole calls for $4\frac{1}{2}$ tablespoons of minced garlic. If this recipe serves 8 people, recalculate the amount of garlic needed to serve 6 people.

$3\frac{3}{8}$ tablespoons

131. Cosmos Company uses $3\frac{1}{7}$ square yards of material to make a slip cover for a chair. The material comes in 1,100 square yard rolls that cost $10,150 each.

a. How many slip covers can be made from each roll?
b. What is the cost of each slip cover?

a. 350 slip covers
b. $29

132. A building has a total area of 20,880 square feet. At the present time, the assembly area occupies $\frac{2}{5}$ of the space, the storage area occupies $\frac{1}{6}$ of the area, and the office occupies the balance of the space.

a. How many square feet of space does the office occupy?
b. If the company wants to increase the size of the assembly area by $\frac{1}{3}$, how many square feet will the assembly area have?

a. 9,048 square feet
b. 11,136 square feet

133. A roll of material is 257 yards long. Janet Barnett cut $9\frac{3}{4}$, $24\frac{1}{12}$, and $22\frac{1}{6}$ yards from the roll.

a. How much material did Janet cut from the roll?
b. How much material was left on the roll?

a. 56 yards
b. 201 yards

134. Jasmine Jackson sold $22\frac{1}{4}$ acres of her $76\frac{7}{8}$ acre ranch. How many acres does Jasmine have left?

$54\frac{5}{8}$ acres

135. Rod Harris earns $180 per day. On Monday, he only worked $\frac{7}{8}$ of a day. How much did Rod earn?

$157.50

136. If a stone cutter has $\frac{3}{4}$ of an ounce of a precious stone and it takes $\frac{1}{8}$ ounce of that stone to make one ring. How many rings can the stone cutter make from the precious stone that he has?

6

137. A recent poll showed that 54 of the 620 people interviewed preferred non-alcoholic beer over regular. What fraction of the people preferred regular beer?

$\frac{283}{310}$

138. During the week Ivey earned $\frac{1}{4}$ and $\frac{1}{3}$ of her monthly bonus on two sales transactions. If those bonuses amounted to $840.00, how much was her monthly bonus?

$1,440.00

139. A tailor needs $3\frac{1}{2}$ yards of cloth in order to make a jacket. He needs $2\frac{5}{8}$ yards in order to make the slacks to complete the suit. If he makes four suits, how much cloth will he need?

$24\frac{1}{2}$

140. A board is $9\frac{3}{4}$ feet in length. A carpenter intends to cut blocks from that board of $1\frac{5}{8}$ feet in length. How many full sizes pieces can be cut from that board of wood?

6

141. At the end of the semester, 14 of the 29 students who started a Physics course remained. What fraction represents the total number of students who dropped the course?

$\frac{15}{29}$