

SAXON 6/5

SUMMER

MATH REVIEW

PACKET



Dear Parents,

The Classical Math Committee would like to take this opportunity to give some reminders about and suggestions for using this math packet.

- This math packet is meant as a review of the previous year's concepts. No new material is presented here, so the problems should not require a lot of effort.
- Since this packet is meant as a review, parents and/or students may not use the packet as an indicator for math level advancement—again the problems should not require a lot of effort.
- Since the packet is a review and preparation for the next math level, students should wait until the end of July or early August to work on it. That way they will reap the benefits of having a review right before starting new curriculum in fall.
- Students should complete the math packet material over the course of several weeks. There is no benefit to rushing through the whole packet in just a few days.
- Finally, parents whose student struggles with this packet should let the administrator or the teacher who will have the student in fall know of the student's struggles.

Thank you,

Classical Math Committee

You may want to have your child visit the following sites for additional practice.

<http://www.mathfactcafe.com/> For elementary math fact practice.

<https://www.math-drills.com> Worksheets for all levels and on-line practice.

Divide:

1. $9 \overline{)981}$

[1] _____

2. $4 \overline{)834}$

[2] _____

3. When the students voted for president, Jason received 117 votes and Jeremy received 155 votes. Jeremy won by how many votes?

[3] _____

4. Kris is 4 years younger than his brother Terell. Kris is 15 years old. How old is Terell?

[4] _____

5. There were 8 more boys than girls in the class. If there were 12 boys in the class, how many girls were there?

[5] _____

6. Kris is 3 years younger than his brother Terell. Kris is 12 years old. How old is Terell?

[A] 13 yr

[B] 14 yr

[C] 16 yr

[D] 15 yr

[6] _____

7. How many years were there from 1482 to 1582?

[7] _____

8. How many years were there from 1272 to 1716?

[8] _____

9. How many years were there from 1223 to 1414?

[9] _____

10. How many years were there from 1203 to 1416?

[A] 213 yr

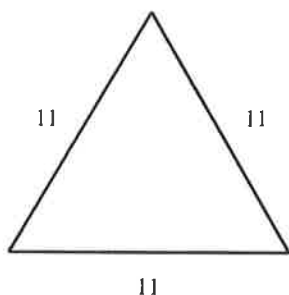
[B] 203 yr

[C] 208 yr

[D] 223 yr

[10] _____

11. Classify the triangle as equilateral, isosceles, or scalene.



[11] _____

12. Name the triangle in which all three angles are acute.

[12] _____

13. Classify the triangle as equilateral, isosceles, or scalene and as right, obtuse, or acute.



[13] _____

14. Classify the triangle as equilateral, isosceles, or scalene and as right, obtuse, or acute.



- [A] equilateral, right [B] isosceles, obtuse [C] isosceles, right [D] equilateral, obtuse

[14] _____

-
15. There are 32 people on your swim team. One half of the team went to a swim meet in June. How many people went to the swim meet in June?

[15] _____

-
16. Emily practiced the trumpet for $\frac{2}{5}$ of an hour. For how many minutes did she practice the trumpet?

[16] _____

-
17. Every package of jolly gobs has 56 gobs. If five eighths of the gobs are red and the rest are blue, into how many parts was the group divided? How many gobs are in each part?

[17] _____

-
18. Every package of jolly gobs has 72 gobs. If three eighths of the gobs are red and the rest are blue, into how many parts was the group divided? How many parts are blue?

- [A] 8, 5 [B] 9, 3 [C] 8, 3 [D] 9, 5

[18] _____

Multiply:

19. 75
 × 26

[19] _____

Multiply:

20. 644×63

[20] _____

21. $\begin{array}{r} \$2.09 \\ \times 26 \\ \hline \end{array}$

[21] _____

22. $\begin{array}{r} 708 \\ \times 27 \\ \hline \end{array}$

[22] _____

23. $\begin{array}{r} \$0.03 \\ \times 72 \\ \hline \end{array}$

[23] _____

24. $\begin{array}{r} \$0.07 \\ \times 51 \\ \hline \end{array}$

[A] \$223.87

[B] \$187.17

[C] \$3.57

[D] \$1.50

[24] _____

Divide:

25. $60 \overline{)840}$

[25] _____

26. $50 \overline{)\$5.50}$

[26] _____

Divide:

27. $10 \overline{)484}$

[27] _____

28. $60 \overline{)\$4.90}$

[A] \$0.08

[B] \$10.82

[C] \$1.08

[D] \$0.82

[28] _____

Multiply:

29. $\begin{array}{r} 137 \\ \times 819 \\ \hline \end{array}$

[29] _____

30. $\begin{array}{r} 247 \\ \times 178 \\ \hline \end{array}$

[30] _____

31. $\begin{array}{r} 803 \\ \times 835 \\ \hline \end{array}$

[A] 670,605

[B] 670,505

[C] 669,405

[D] 670,495

[31] _____

32. Find the product of 981 and 509.

[32] _____

Multiply:

33. 256×250

[33] _____

34. $\begin{array}{r} \$2.38 \\ \times 590 \\ \hline \end{array}$

[34] _____

35. $\begin{array}{r} \$2.01 \\ \times 560 \\ \hline \end{array}$

[A] \$1125.60

[B] \$1115.60

[C] \$1225.60

[D] \$11,256.00

[35] _____

Subtract:

36. $\begin{array}{r} 10 \\ - 7\frac{2}{3} \\ \hline \end{array}$

[36] _____

37. $5 - 3\frac{3}{4}$

[37] _____

38. $\begin{array}{r} 39 \\ - 18\frac{4}{5} \\ \hline \end{array}$

[A] $21\frac{4}{5}$

[B] $21\frac{1}{5}$

[C] $20\frac{4}{5}$

[D] $20\frac{1}{5}$

[38] _____

39. 80 millimeters is how many centimeters?

[39] _____

40. William is 1 meter plus 31 centimeters tall. Use a decimal number to write his height in meters.

[40] _____

41. Find the reasonable height for a basketball hoop expressed in metric terms.

[41] _____

42. What is a reasonable height for a house?

[A] 10 cm

[B] 10 mm

[C] 10 km

[D] 10 m

[42] _____

43. Write 2.214 in words.

[43] _____

44. Write fifty-six and thirty-three thousandths in standard form.

[44] _____

45. Write forty-one and thirty-eight hundredths in standard form.

[45] _____

46. Which represents forty-two and thirty-seven thousandths in standard form?

[A] 4,237,000

[B] 0.4237

[C] 42.037

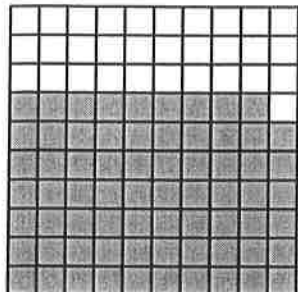
[D] 42.37

[46] _____

47. The fraction $\frac{3}{5}$ is equivalent to 0.6 and to 60%. Express 0.6 and 60% as unreduced fractions.

[47] _____

48. Express the shaded part as a fraction, as a decimal, and as a percent.

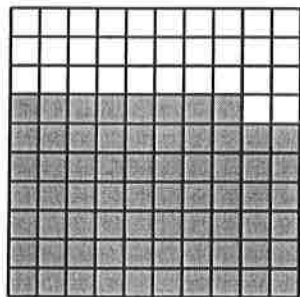


[48] _____

49. Compare: 1.231 1.739

[49] _____

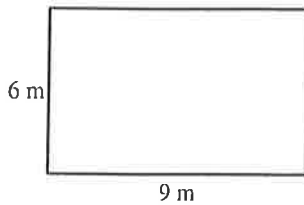
50. Express the shaded part as a fraction, as a decimal, and as a percent.



- [A] $\frac{32}{100}$; 3.2; 32% [B] $\frac{68}{100}$; 0.68; 68% [C] $\frac{32}{100}$; 0.32; 32% [D] $\frac{68}{100}$; 6.8; 68%

[50] _____

51. What is the area of this rectangle?



[51] _____

52. Estimate the area of a room that is 16 ft 7 in. long and 9 ft 7 in. wide.

[A] 144 ft²

[B] 170 ft²

[C] 153 ft²

[D] 160 ft²

[52] _____

53. Add: 9.73

+ 4.1

[53] _____

54. Subtract: 7.72

– 5.1

[54] _____

55. Add: 10

15.47

+ 14.3

[55] _____

56. In a three-person medley relay race, the 100-meter leg was run in 9.99 seconds, the 200-meter leg in 20.53 seconds, and the 400-meter leg in 45.79 seconds. What was the total time for the race?

[A] 76.31 sec

[B] 77.31 sec

[C] 76.41 sec

[D] 25.44 sec

[56] _____

Multiply:

57. $\frac{1}{7} \times \frac{5}{9}$

[57] _____

58. $\frac{7}{9} \times \frac{7}{9}$

[58] _____

59. A nickel is what fraction of a dollar?

[59] _____

60. A nickel is what fraction of a dime?

[A] $\frac{1}{5}$

[B] $\frac{1}{4}$

[C] $\frac{1}{3}$

[D] $\frac{1}{2}$

[60] _____

61. Express as a whole number: 2^5

[61] _____

62. If $2n = 4$, then what does n^2 equal?

[62] _____

63. Write 1,600,000 in expanded notation using powers of 10.

[63] _____

64. Which shows 2,900,000 in expanded notation using powers of 10?

[64] _____

[A] $(9 \times 10^6) + (2 \times 10^5)$

[B] $(9 \times 10^6) + (2 \times 10^4)$

[C] $(2 \times 10^6) + (9 \times 10^4)$

[D] $(2 \times 10^6) + (9 \times 10^5)$

65. Find the value of each \square . $\frac{1}{6} = \frac{1 \times 4}{6 \times 4} = \frac{\square}{\square}$

[65] _____

66. Find the missing values: $\frac{3}{8} \times \frac{?}{?} = \frac{18}{48}$

[66] _____

67. Find a fraction equivalent to $\frac{1}{4}$ with a denominator of 16.

[67] _____

68. Find the value of each \square . $\frac{3}{7} = \frac{3 \times 2}{7 \times 2} = \frac{\square}{\square}$

[A] $\frac{7}{14}$

[B] $\frac{6}{15}$

[C] $\frac{7}{15}$

[D] $\frac{6}{14}$

[68] _____

Reduce:

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

[69] _____

Reduce:

70. $6\frac{4}{20}$

[70] _____

71. Solve. Reduce your answer: $6\frac{11}{14} - 2\frac{5}{14}$

[A] 62

[B] $9\frac{1}{7}$

[C] $4\frac{3}{7}$

[D] $\frac{7}{8}$

[71] _____

72. Find the greatest common factor of 48 and 8.

[72] _____

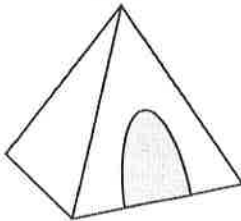
73. What is the greatest common factor of 20 and 30?

[73] _____

74. What is the greatest common factor of 40 and 8?

[74] _____

75. Name the shape of a tent.

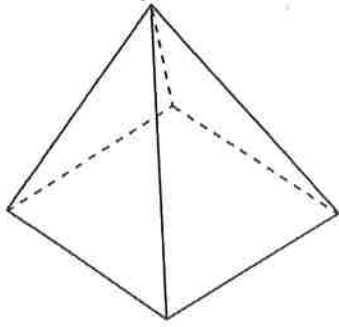


[75] _____

76. Name the geometric solid suggested by a filing cabinet.

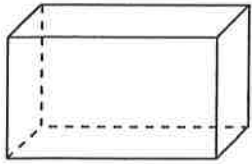
[76] _____

77. How many vertices does the pyramid have?



[77] _____

78. How many vertices does the rectangular prism have?



[A] 11

[B] 10

[C] 8

[D] 9

[78] _____

79. Find the mean of the data set 82, 78, 89, 89, 80, 89, 89, and 84.

[79] _____

80. Tom's last nine golf scores on a par-72 course were 76, 75, 87, 84, 75, 75, 83, 88, and 86. Find the median of the set of data.

[80] _____

81. A high school English instructor returned graded essays to 8 students in a sophomore English class. The students had the following scores: 47, 42, 41, 71, 71, 71, 64, 51, and 47. Find the (a) range and (b) mode of this set of scores.

[81] _____

82. A high school English instructor returned graded essays to 10 students in a sophomore English class. The students had the following scores: 52, 70, 71, 70, 62, 44, 73, 58, 70, 70, and 70. Find the (a) range and (b) mode of this set of scores.

[A] (a) 31
(b) 70

[B] (a) 29
(b) 70

[C] (a) 31
(b) 75

[D] (a) 29
(b) 75

[82] _____

Multiply:

83. $7 \times \frac{2}{9}$

[83] _____

84. $\frac{1}{7} \times 3$

[84] _____

85. What number is $\frac{1}{3}$ of 9?

[85] _____

86. Multiply: $\frac{1}{17} \times 5$

[A] $\frac{5}{17}$

[B] $\frac{1}{85}$

[C] $\frac{85}{5}$

[D] $\frac{5}{85}$

[86] _____

87. How many twelfths are in three fourths?

[87] _____

88. $\frac{1}{2} \div \frac{1}{12}$

[88] _____

89. $\frac{3}{4} \div \frac{1}{4}$

[89] _____

90. How many twelfths are in one third?

[A] 6

[B] 4

[C] 3

[D] 5

[90] _____

91. Reduce: $\frac{12}{54}$

[91] _____

Solve. Reduce your answer:

92. $\frac{4}{5} \times \frac{7}{10}$

[92] _____

93. $\frac{3}{6} + \frac{1}{6}$

[93] _____

Solve. Reduce your answer:

94. $\frac{1}{8} \times \frac{2}{9}$

[A] $\frac{1}{24}$

[B] $\frac{3}{17}$

[C] $\frac{1}{36}$

[D] $\frac{16}{9}$

[94] _____

Solve. Simplify your answer:

95. $6 \times \frac{1}{4}$

[95] _____

96. $2\frac{4}{6} + 3\frac{3}{6}$

[96] _____

97. Simplify: $\frac{10}{8}$

[97] _____

98. Solve. Simplify your answer: $6\frac{6}{12} + 8\frac{9}{12}$

[A] $15\frac{1}{4}$

[B] $16\frac{1}{3}$

[C] $16\frac{1}{4}$

[D] $15\frac{1}{3}$

[98] _____

Divide:

99. $42 \overline{)896}$

[99] _____

Divide:

100. $18 \overline{)216}$

[100] _____

101. $24 \overline{)965}$

[101] _____

102. $23 \overline{)444}$

[A] 19 R7

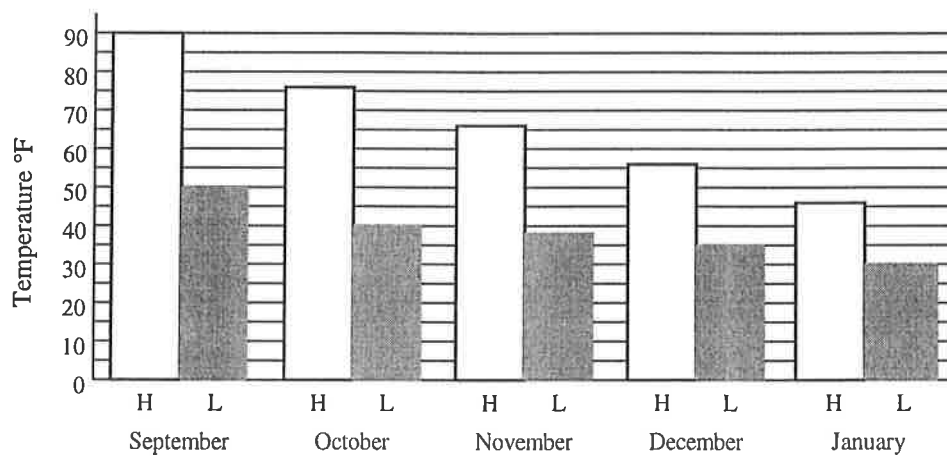
[B] 18 R8

[C] 26

[D] 7 R20

[102] _____

103. Ms. Schultz's class kept a record of the highest and lowest temperatures in each of five months. What was the lowest temperature recorded in the five months?

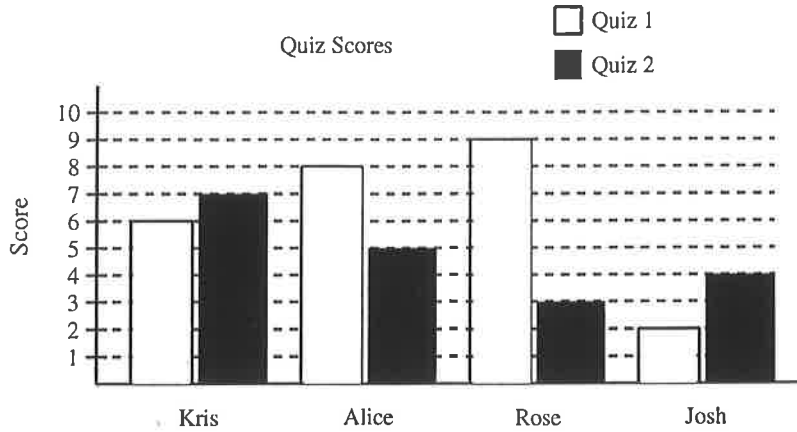


[103] _____

104. Kris, Alice, Rose, and Josh each take two quizzes. Each quiz has ten questions. The scores on the quizzes are shown in the table below.

(a) Who scores lowest on Quiz 1?

(b) Who scores highest on Quiz 2?



[A] (a) Kris
(b) Alice

[B] (a) Kris
(b) Kris

[C] (a) Josh
(b) Alice

[D] (a) Josh
(b) Kris

[104] _____

105. Divide: $1 \div \frac{8}{7}$

[105] _____

106. How many $\frac{3}{8}$'s are in 1?

[106] _____

107. Find the reciprocal of 3.

[107] _____

Divide:

108. $1 \div \frac{9}{5}$

[A] $\frac{1}{5}$

[B] $\frac{1}{9}$

[C] $\frac{5}{9}$

[D] 1

[108] _____

109. $4 \div \frac{1}{5}$

[109] _____

110. How many $\frac{1}{8}$'s are in $\frac{8}{9}$?

[110] _____

111. How many $\frac{3}{4}$'s are in $\frac{1}{3}$?

[111] _____

112. How many $\frac{2}{3}$'s are in $\frac{1}{2}$?

[A] $\frac{4}{3}$

[B] $\frac{1}{3}$

[C] 3

[D] $\frac{3}{4}$

[112] _____

113. Ms. Strauss fills gum and trinket machines in front of grocery stores. In the trinket machine, there are two types of trinkets—tattoos and rings. If Ms. Strauss puts 28 tattoos and 36 rings in a machine, what is the ratio of tattoos to all the trinkets in the machine?

[113] _____

114. The Evergreen Warriors had a record of 45 wins and 35 losses. What was the ratio of wins to losses?

[114] _____

115. Sarah sold 10 tickets to the school play, and Maria sold 24 tickets. What is the ratio of the number of tickets Sarah sold to the number of tickets Maria sold?

[115] _____

116. Ms. Strauss fills gum and trinket machines in front of grocery stores. In the trinket machine, there are two types of trinkets—necklaces and rings. If Ms. Strauss puts 20 necklaces and 36 rings in a machine, what is the ratio of rings to all the trinkets in the machine?

[A] $\frac{14}{9}$

[B] $\frac{9}{14}$

[C] $\frac{5}{9}$

[D] $\frac{9}{5}$

[116] _____

117. Add: $61 + 11.31 + 13.3$

[117] _____

118. Subtract: $36 - 2.3$

[118] _____

Add:

119. $7 + 29.15$

[119] _____

120. $15 + 11.34 + 13.4$

[A] 39.74

[B] 39.38

[C] 39.97

[D] 39.85

[120] _____

Subtract:

121. $8 - 0.36$

[121] _____

122. $8.5 - 1$

[122] _____

123. $0.7 - 0.22$

[123] _____

124. $0.5 - 0.27$

[A] 0.73

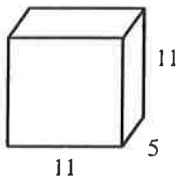
[B] 0.21

[C] 0.23

[D] 0.31

[124] _____

125. Find the volume of the solid figure. Dimensions are in millimeters.



[125] _____

126. Gary's closet is 4 feet wide, 4 feet deep, and 10 feet high. How many boxes that are 1-foot cubes could Gary fit into his closet?

[126] _____

127. Round 84.1 to the nearest whole number.

[127] _____

128. Which of these numbers round to 30 when rounded to the nearest whole number?

30.19 29.38 30.62 30.81
30.33 29.8 29.12 29.58

[128] _____

129. Estimate the product: 8.1×6.9

[129] _____

130. What is 92.6 rounded to the nearest whole number?

[A] 92

[B] 90

[C] 93

[D] 94

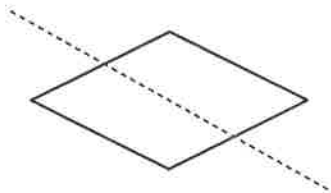
[130] _____

131. Which letter has rotational symmetry?

E O J R

[131] _____

132. Is this line a line of symmetry?



[132] _____

133. Fitzroy answered 17 of 50 questions correctly. What percent of the questions did he answer correctly?

[133] _____

134. In a roll of 50 pennies, 16 were minted before 1982. What percent of the pennies in the roll were minted before 1982?

[134] _____

135. The Patrini Paint Store gives a discount to 4 of every 10 shoppers. What percent of the shoppers receive a discount?

[135] _____

136. Lucretia answered 23 of 50 questions correctly. What percent of the questions did she answer correctly?

[A] 92%

[B] 46%

[C] 23%

[D] 11.5%

[136] _____

137. Tom rode the train from Chicago to St. Louis. According to the schedule, from the time the train departs Chicago until the time it arrives in St. Louis is how many hours and minutes?

Station	Arrive	Depart
Chicago, IL		10:30 a.m.
Joliet, IL	11:35 a.m.	11:55 a.m.
Bloomington, IL	02:05 p.m.	02:35 p.m.
Springfield, IL	03:00 p.m.	03:55 p.m.
St. Louis, MO	05:40 p.m.	

[137] _____

138. The city park is sponsoring an all-comers track meet. The first event is scheduled to start at 11:00 a.m., and each event will take 25 minutes. If the track meet is running 5 minutes late and Sally is scheduled to run in the 400-meter race, what time will her event start? The original schedule is shown below.

Event	Start Time
100-meter race	11:00 a.m.
100-meter hurdles	11:25 a.m.
400-meter race	11:50 a.m.
800-meter race	12:15 p.m.

[138] _____

139. Ralph is sightseeing. He wants to take a trolley from Lakefront Park to the zoo. The trips start at 1:30 p.m. and take 25 minutes. Trolley departures occur every 20 minutes. Complete the table.

Trolley	Departs	Arrives
First	1:30 p.m.	
Second		
Third		
Fourth		

[139] _____

140. Hiro is sightseeing. He wants to take a trolley from Lakefront Park to the zoo. The trips start at 1:05 p.m. and take 25 minutes. Trolley departures occur every 10 minutes. Which of the following tables shows the correct departure and arrival times for the trolleys?

[A]

Trolley	Departs	Arrives
First	1:05 p.m.	1:30 p.m.
Second	1:15 p.m.	1:40 p.m.
Third	1:25 p.m.	1:50 p.m.
Fourth	1:35 p.m.	2:00 p.m.

[B]

Trolley	Departs	Arrives
First	1:05 p.m.	1:15 p.m.
Second	1:30 p.m.	1:40 p.m.
Third	1:55 p.m.	2:05 p.m.
Fourth	2:20 p.m.	2:30 p.m.

[C]

Trolley	Departs	Arrives
First	1:05 p.m.	1:15 p.m.
Second	1:15 p.m.	1:25 p.m.
Third	1:25 p.m.	1:35 p.m.
Fourth	1:35 p.m.	1:45 p.m.

[D]

Trolley	Departs	Arrives
First	1:05 p.m.	1:30 p.m.
Second	1:30 p.m.	1:55 p.m.
Third	1:55 p.m.	2:20 p.m.
Fourth	2:20 p.m.	2:45 p.m.

[140] _____

Multiply:

141. 0.4×0.71

[141] _____

142. 4.17

$\times 3$

[142] _____

Multiply:

143. 0.5×0.23

[A] 11.5

[B] 1.15

[C] 0.115

[D] 0.0115

[143] _____

144. 0.2×0.23

[144] _____

145. $\begin{array}{r} 0.01 \\ \times 0.3 \\ \hline \end{array}$

[145] _____

146. 0.03×0.31

[A] 0.00093

[B] 0.0093

[C] 0.93

[D] 0.093

[146] _____

147. 0.066×100

[147] _____

148. 0.804×1000

[148] _____

149. 0.998×10

[A] 9.98

[B] 998

[C] 0.998

[D] 99.8

[149] _____

150. What is the least common multiple of 2 and 8?

[150] _____

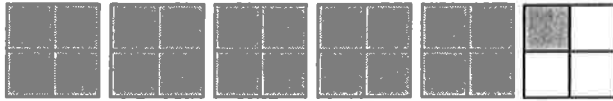
151. List the first three common multiples of 4 and 5.

[151] _____

152. The denominators of $\frac{1}{6}$ and $\frac{7}{8}$ are 6 and 8. What is the least common multiple of 6 and 8?

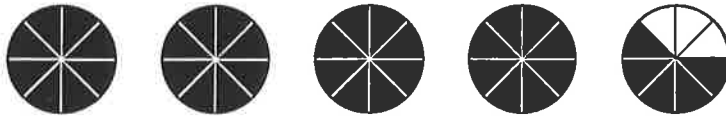
[152] _____

153. Write an improper fraction and a mixed number for the shaded parts.



[153] _____

154. Write an improper fraction and a mixed number for the shaded parts.

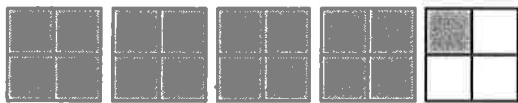


[154] _____

155. What is the improper fraction for the mixed number $1\frac{2}{3}$?

[155] _____

156. Which improper fraction and mixed number are represented by the shaded parts?



[A] $\frac{17}{4}$; $4\frac{1}{4}$

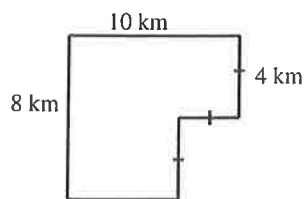
[B] $\frac{19}{4}$; $3\frac{3}{4}$

[C] $\frac{7}{2}$; $3\frac{1}{2}$

[D] $\frac{9}{2}$; 4

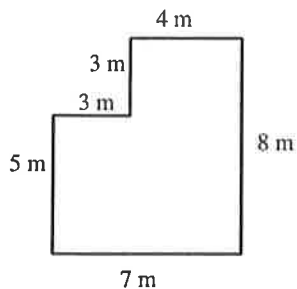
[156] _____

157. Two rectangles are joined to form a hexagon. Find the area of the hexagon.



[157] _____

158. Two rectangles are joined to form a hexagon. What is the area of the hexagon?



[A] 47 m^2

[B] 52 m^2

[C] 50 m^2

[D] 45 m^2

[158] _____

159. Subtract: $\frac{5}{7} - \frac{1}{14}$

[159] _____

Compare:

160. $\frac{28}{31} \bigcirc \frac{6}{27}$

[160] _____

161. $\frac{4}{29} \bigcirc \frac{3}{9}$

[161] _____

[A] $<$

[B] $>$

[C] $=$

Divide:

162. $5 \overline{)2.5}$

[162] _____

163. $4.97 \div 7$

[163] _____

164. $6 \overline{)0.3}$

[A] 5

[B] 50

[C] 0.05

[D] 5.1

[164] _____

165. $7 \overline{)0.42}$

[165] _____

166. $4 \overline{)0.0012}$

[166] _____

167. $6 \overline{)0.0018}$

[A] 0.0003

[B] 0.03

[C] 0.3

[D] 0.003

[167] _____

168. $16.4 \div 100$

[168] _____

169. $100 \overline{)179.25}$

[169] _____

Divide:

170. $46.83 \div 100$

[170] _____

171. $10 \overline{)45.76}$

[A] 457.6

[B] 0.4576

[C] 4.576

[D] 0.04576

[171] _____

172. $0.8 \overline{)3.04}$

[172] _____

173. $0.6 \overline{)1.8}$

[173] _____

174. $1.1 \overline{)0.55}$

[A] 5

[B] 0.05

[C] 0.005

[D] 0.5

[174] _____

175. Write the number represented by the Roman numeral DCCLXVII.

[175] _____

176. Write the number represented by the Roman numeral MDCIX.

[176] _____

177. Write the number represented by the Roman numeral MMCCCVI.

[177] _____

--END--

Answer Key

①

Post Saxon 6/5 Review

- [1] 109
- [2] 208 R2
- [3] 38
- [4] 19 yr
- [5] 4
- [6] [D]
- [7] 100 yr
- [8] 444 yr
- [9] 191 yr
- [10] [A]
- [11] equilateral
- [12] acute
- [13] isosceles, obtuse
- [14] [B]
- [15] 16
- [16] 24 min
- [17] 8, 7
- [18] [A]
- [19] 1950
- [20] 40,572
- [21] \$54.34
- [22] 19,116
- [23] \$2.16
- [24] [C]
- [25] 14
- [26] \$0.11
- [27] 48 R4
- [28] [A]
- [29] 112,203
- [30] 43,966
- [31] [B]
- [32] 499,329
- [33] 64,000
- [34] \$1404.20
- [35] [A]
- [36] $2\frac{1}{3}$
- [37] $1\frac{1}{4}$
- [38] [D]
- [39] 8 cm
- [40] 1.31 m
- [41] Answers may vary. Sample answer: 2 m
- [42] [D]
- [43] two and two hundred fourteen thousandths
- [44] 56.033
- [45] 41.38
- [46] [C]
- [47] $\frac{6}{10}; \frac{60}{100}$
- [48] $\frac{69}{100}; 0.69; 69\%$
- [49] $<$
- [50] [B]
- [51] 54 m^2
- [52] [B]
- [53] 13.83

- [54] 2.62
- [55] 39.77
- [56] [A]
- [57] $\frac{5}{63}$
- [58] $\frac{49}{81}$
- [59] $\frac{1}{20}$
- [60] [D]
- [61] 32
- [62] 4
- [63] $(1 \times 10^6) + (6 \times 10^5)$
- [64] [D]
- [65] $\frac{4}{24}$
- [66] $\frac{6}{6}$
- [67] $\frac{4}{16}$
- [68] [D]
- [69] $\frac{3}{4}$
- [70] $6\frac{1}{5}$
- [71] [C]
- [72] 8
- [73] 10
- [74] 8
- [75] pyramid
- [76] rectangular solid
- [77] 5
- [78] [C]
- [79] 85
- [80] 83
- [81] (a) 30
(b) 71
- [82] [B]
- [83] $1\frac{5}{9}$
- [84] $\frac{3}{7}$
- [85] 3
- [86] [A]
- [87] 9
- [88] 6
- [89] 3
- [90] [B]
- [91] $\frac{2}{9}$
- [92] $\frac{14}{25}$
- [93] $\frac{2}{3}$
- [94] [C]
- [95] $1\frac{1}{2}$
- [96] $6\frac{1}{6}$
- [97] $1\frac{1}{4}$
- [98] [A]
- [99] 21 R14
- [100] 12
- [101] 40 R5
- [102] [A]
- [103] 30°F
- [104] [D]
- [105] $\frac{7}{8}$
- [106] $\frac{8}{3}$ or $2\frac{2}{3}$
- [107] $\frac{1}{3}$
- [108] [C]
- [109] 20
- [110] $7\frac{1}{9}$
- [111] $\frac{4}{9}$
- [112] [D]
- [113] $\frac{7}{16}$
- [114] $\frac{9}{7}$
- [115] $\frac{5}{12}$
- [116] [B]
- [117] 85.61
- [118] 33.7

[119] 36.15

[138] 11:55 a.m.

[154] $\frac{37}{8}; 4\frac{5}{8}$

[120] [A]

Trolley	Departs	Arrives
First	1:30 p.m.	1:55 p.m.
Second	1:50 p.m.	2:15 p.m.
Third	2:10 p.m.	2:35 p.m.
Fourth	2:30 p.m.	2:55 p.m.

[155] $\frac{5}{3}$

[121] 7.64

[156] [A]

[122] 7.5

[139]

[157] 64 km²

[123] 0.48

[140] [A]

[158] [A]

[124] [C]

[141] 0.284

[125] 605 mm³

[142] 12.51

[159] $\frac{9}{14}$

[126] 160

[143] [C]

[160] >

[127] 84

[144] 0.046

[161] [A]

[128] 30.19, 29.58, 30.33, 29.8

[145] 0.003

[162] 0.5

[129] 56

[146] [B]

[163] 0.71

[130] [C]

[147] 6.6

[164] [C]

[131] O

[148] 804

[165] 0.06

[171] [C]

[132] No

[149] [A]

[166] 0.0003

[172] 3.8

[133] 34%

[150] 8

[167] [A]

[173] 3

[134] 32%

[151] 20, 40, 60

[168] 0.164

[174] [D]

[135] 40%

[152] 24

[169] 1.7925

[175] 767

[136] [B]

[153] $\frac{21}{4}; 5\frac{1}{4}$

[170] 0.4683

[176] 1609

[137] 7 hr 10 min

[177] 2306

$$\begin{array}{r} \boxed{} \\ + 97.68 \\ \hline 148.17 \end{array}$$

$$\begin{array}{r} \boxed{} \\ + 98.22 \\ \hline 134.24 \end{array}$$



© Copyright 2000-2008 Math Fact Cafe, LLC. All rights reserved.

1)	2)	3)	4)	5)
<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	90.97	<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>
- 17.22	- 59.88	- 67.80	- <div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto;"></div>	- 18.80
74.98	18.55	30.26	5.08	31.68

6)	7)	8)	9)	10)
$\begin{array}{r} 84.30 \\ - \\ \hline 49.4 \end{array}$	$\begin{array}{r} \\ - 12.45 \\ \hline 30.38 \end{array}$	$\begin{array}{r} 91.48 \\ - \\ \hline 10.57 \end{array}$	$\begin{array}{r} \\ - 76.83 \\ \hline 4.30 \end{array}$	$\begin{array}{r} 87.40 \\ - \\ \hline 76.6 \end{array}$

$$\begin{array}{r} 90.97 \\ + 85.89 \\ \hline 176.86 \end{array}$$

$$\begin{array}{r} 50.48 \\ + 18.80 \\ \hline 69.28 \end{array}$$

$$\begin{array}{r} 84.30 \\ + 34.90 \\ \hline 119.2 \end{array}$$

$$\begin{array}{r} 50.49 \\ + 97.68 \\ \hline 148.17 \end{array}$$

$$\begin{array}{r} 42.05 \\ + 99.49 \\ \hline 141.54 \end{array}$$

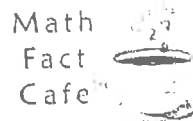
$$\begin{array}{r} 53.39 \\ + 69.34 \\ \hline 122.73 \end{array}$$

$$\begin{array}{r} 40.24 \\ + 97.89 \\ \hline 138.13 \end{array}$$

$$\begin{array}{r} 36.02 \\ + 98.22 \\ \hline 134.24 \end{array}$$

<http://www.mathfactcafe.com/build/viewbuild.aspx?vid=1&mmd=...>

Answer Sheet



© Copyright 2000-2008 Math Fact Cafe, LLC. All rights reserved.

$$\begin{array}{r} 1) \\ 92.20 \\ - 17.22 \\ \hline 74.98 \end{array}$$

$$\begin{array}{r} 2) \\ 78.43 \\ - 59.88 \\ \hline 18.55 \end{array}$$

$$\begin{array}{r} 3) \\ 98.06 \\ - 67.80 \\ \hline 30.26 \end{array}$$

$$\begin{array}{r} 4) \\ 90.97 \\ - 85.89 \\ \hline 5.08 \end{array}$$

$$\begin{array}{r} 5) \\ 50.48 \\ - 18.80 \\ \hline 31.68 \end{array}$$

$$\begin{array}{r} 6) \\ 84.30 \\ - 34.90 \\ \hline 49.4 \end{array}$$

$$\begin{array}{r} 7) \\ 42.83 \\ - 12.45 \\ \hline 30.38 \end{array}$$

$$\begin{array}{r} 8) \\ 91.48 \\ - 80.91 \\ \hline 10.57 \end{array}$$

$$\begin{array}{r} 9) \\ 81.13 \\ - 76.83 \\ \hline 4.30 \end{array}$$

$$\begin{array}{r} 10) \\ 87.40 \\ - 10.80 \\ \hline 76.6 \end{array}$$

$$\begin{array}{r} 38 \\ \times 55 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 26 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ \times 63 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ \times 63 \\ \hline \end{array}$$

$$\begin{array}{r} 80 \\ \times 46 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ \times 21 \\ \hline \end{array}$$

$$\begin{array}{r} 69 \\ \times 93 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 49 \\ \hline \end{array}$$

$$\begin{array}{r} 96 \\ \times 38 \\ \hline \end{array}$$

$$\begin{array}{r} 61 \\ \times 50 \\ \hline \end{array}$$

$$\begin{array}{r} 85 \\ \times 42 \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ \times 24 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} 64 \\ \times 99 \\ \hline \end{array}$$

$$\begin{array}{r} 61 \\ \times 92 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ \times 55 \\ \hline 190 \\ 1900 \\ \hline 2090 \end{array}$$

$$\begin{array}{r} 43 \\ \times 26 \\ \hline 258 \\ 860 \\ \hline 1118 \end{array}$$

$$\begin{array}{r} 28 \\ \times 63 \\ \hline 84 \\ 1680 \\ \hline 1764 \end{array}$$

$$\begin{array}{r} 45 \\ \times 63 \\ \hline 135 \\ 2700 \\ \hline 2835 \end{array}$$

$$\begin{array}{r} 80 \\ \times 46 \\ \hline 480 \\ 3200 \\ \hline 3680 \end{array}$$

$$\begin{array}{r} 86 \\ \times 47 \\ \hline 602 \\ 3440 \\ \hline 4042 \end{array}$$

$$\begin{array}{r} 83 \\ \times 21 \\ \hline 83 \\ 1660 \\ \hline 1743 \end{array}$$

$$\begin{array}{r} 69 \\ \times 93 \\ \hline 207 \\ 6210 \\ \hline 6417 \end{array}$$

$$\begin{array}{r} 86 \\ \times 49 \\ \hline 774 \\ 3440 \\ \hline 4214 \end{array}$$

$$\begin{array}{r} 96 \\ \times 38 \\ \hline 768 \\ 2880 \\ \hline 3648 \end{array}$$

$$\begin{array}{r} 61 \\ \times 50 \\ \hline 3050 \end{array}$$

$$\begin{array}{r} 85 \\ \times 42 \\ \hline 170 \\ 3400 \\ \hline 3570 \end{array}$$

$$\begin{array}{r} 76 \\ \times 24 \\ \hline 304 \\ 1520 \\ \hline 1824 \end{array}$$

$$\begin{array}{r} 24 \\ \times 28 \\ \hline 192 \\ 480 \\ \hline 672 \end{array}$$

$$\begin{array}{r} 64 \\ \times 99 \\ \hline 576 \\ 5760 \\ \hline 6336 \end{array}$$

$$\begin{array}{r} 61 \\ \times 92 \\ \hline 122 \\ 5490 \\ \hline 5612 \end{array}$$

$$5 \overline{)282}$$

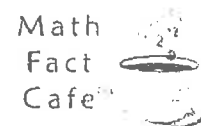
$$5 \overline{)103}$$

$$4 \overline{)303}$$

$$9 \overline{)768}$$

$$6 \overline{)331}$$

$$2 \overline{)91}$$



© Copyright 2000-2008 Math Fact Cafe, LLC. All rights reserved.

1)	$\begin{array}{r} 16.67 \\ \times 20.30 \\ \hline \end{array}$	2)	$\begin{array}{r} 11.16 \\ \times 77.86 \\ \hline \end{array}$	3)	$\begin{array}{r} 6.66 \\ \times 48.33 \\ \hline \end{array}$	4)	$\begin{array}{r} 92.20 \\ \times 17.22 \\ \hline \end{array}$
----	--	----	--	----	---	----	--

5)	$\begin{array}{r} 16.22 \\ \times 38.41 \\ \hline \end{array}$	6)	$\begin{array}{r} 56.79 \\ \times 91.22 \\ \hline \end{array}$	7)	$\begin{array}{r} 49.86 \\ \times 51.01 \\ \hline \end{array}$	8)	$\begin{array}{r} 78.43 \\ \times 59.88 \\ \hline \end{array}$
----	--	----	--	----	--	----	--

$$\begin{array}{r} 56r2 \\ 5 \overline{)282} \\ \underline{25} \\ 32 \\ \underline{30} \\ 2 \end{array}$$

$$\begin{array}{r} 20r3 \\ 5 \overline{)103} \\ \underline{10} \\ 03 \\ \underline{0} \\ 3 \end{array}$$

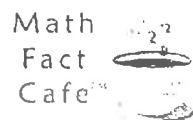
$$\begin{array}{r} 75r3 \\ 4 \overline{)303} \\ \underline{28} \\ 23 \\ \underline{20} \\ 3 \end{array}$$

$$\begin{array}{r} 85r3 \\ 9 \overline{)768} \\ \underline{72} \\ 48 \\ \underline{45} \\ 3 \end{array}$$

$$\begin{array}{r} 55r1 \\ 6 \overline{)331} \\ \underline{30} \\ 31 \\ \underline{30} \\ 1 \end{array}$$

$$\begin{array}{r} 45r1 \\ 2 \overline{)91} \\ \underline{8} \\ 11 \\ \underline{10} \\ 1 \end{array}$$

Answer Sheet



© Copyright 2000-2008 Math Fact Cafe, LLC. All rights reserved.

$$\begin{array}{r} 1) \quad 16.67 \\ \times 20.30 \\ \hline 338.401 \end{array}$$

$$\begin{array}{r} 2) \quad 11.16 \\ \times 77.86 \\ \hline 868.9176 \end{array}$$

$$\begin{array}{r} 3) \quad 6.66 \\ \times 48.33 \\ \hline 321.8778 \end{array}$$

$$\begin{array}{r} 4) \quad 92.20 \\ \times 17.22 \\ \hline 1587.684 \end{array}$$

$$\begin{array}{r} 5) \quad 16.22 \\ \times 38.41 \\ \hline 623.0102 \end{array}$$

$$\begin{array}{r} 6) \quad 56.79 \\ \times 91.22 \\ \hline 5180.3838 \end{array}$$

$$\begin{array}{r} 7) \quad 49.86 \\ \times 51.01 \\ \hline 2543.3586 \end{array}$$

$$\begin{array}{r} 8) \quad 78.43 \\ \times 59.88 \\ \hline 4696.3884 \end{array}$$

Multiplication by Powers of Ten

EXAMPLES

When you multiply a number by 10, write the number.
Then write a zero at the end. $235 \times 10 = 2,350$

When you multiply a number by 100, write the number.
Then write two zeros at the end.

$235 \times 100 = 23,500$

When you multiply a number by 1,000, write the number.
Then write three zeros at the end.

$235 \times 1,000 = 235,000$

Directions Multiply by these powers of ten.

1. $325 \times 10 =$ _____

21. $412 \times 1,000 =$ _____

2. $421 \times 100 =$ _____

22. $906 \times 1,000 =$ _____

3. $4,631 \times 10 =$ _____

23. $10,802 \times 100 =$ _____

4. $6,023 \times 100 =$ _____

24. $104 \times 100 =$ _____

5. $702 \times 100 =$ _____

25. $56 \times 10 =$ _____

6. $3,011 \times 1,000 =$ _____

26. $13 \times 100 =$ _____

Multiplication of Whole Numbers

EXAMPLE

Write the problem in vertical form. Multiply.

$52 \times 42 = \underline{2,184}$

$$\begin{array}{r} 52 \\ \times 42 \\ \hline 104 \\ + 208 \\ \hline 2,184 \end{array}$$

Directions Rewrite these multiplication problems in the vertical form and multiply.

1. $24 \times 22 =$ _____

15. $920 \times 724 =$ _____

2. $61 \times 18 =$ _____

16. $856 \times 326 =$ _____

3. $201 \times 43 =$ _____

17. $3,021 \times 307 =$ _____

4. $85 \times 72 =$ _____

18. $638 \times 800 =$ _____

5. $712 \times 66 =$ _____

19. $4,160 \times 110 =$ _____

Name _____

Date _____

Period _____

Workbook Activity

Chapter 1, Lesson 6

10

Division of Whole Numbers

EXAMPLE

Write the problem in standard form. Divide.

$168 \div 6 = \underline{\quad 28 \quad}$

$$\begin{array}{r} 28 \\ 6 \overline{)168} \\ \underline{-12} \\ 48 \\ \underline{-48} \\ 0 \end{array}$$

Directions Rewrite the following division problems in the standard form and divide.

- | | |
|-------------------------|-----------------------------|
| 1. $128 \div 4 =$ _____ | 15. $3,036 \div 6 =$ _____ |
| 2. $477 \div 9 =$ _____ | 16. $8,844 \div 11 =$ _____ |
| 3. $266 \div 7 =$ _____ | 17. $6,030 \div 3 =$ _____ |
| 4. $480 \div 5 =$ _____ | 18. $5,400 \div 6 =$ _____ |

Name _____

Date _____

Period _____

Workbook Activity

Chapter 1, Lesson 6

12

Dividing Numbers by Powers of Ten

EXAMPLE

Write the problem in standard form and divide.

$480 \div 10 =$

Or move the decimal point one place to the left for each zero in the divisor.

$48,0 \div 10 =$

$$\begin{array}{r} 48 \\ 10 \overline{)480} \\ \underline{-40} \\ 80 \\ \underline{-80} \\ 0 \end{array}$$

Directions Divide by these powers of ten.

- | | |
|---------------------------------|------------------------------------|
| 1. $840 \div 10 =$ _____ | 21. $451,000 \div 1,000 =$ _____ |
| 2. $65,000 \div 100 =$ _____ | 22. $390,000 \div 10 =$ _____ |
| 3. $2,000 \div 100 =$ _____ | 23. $680,000 \div 100 =$ _____ |
| 4. $4,630 \div 10 =$ _____ | 24. $4,060,300 \div 10 =$ _____ |
| 5. $9,600 \div 100 =$ _____ | 25. $19,600 \div 10 =$ _____ |
| 6. $140,000 \div 1,000 =$ _____ | 26. $9,603,000 \div 1,000 =$ _____ |
| 7. $191,000 \div 10 =$ _____ | 27. $5,000,000 \div 100 =$ _____ |
| 8. $920,000 \div 100 =$ _____ | 28. $7,000,000 \div 10 =$ _____ |

Name _____

Date _____

Period _____

Workbook Activity

Chapter 1, Lesson 8

15

Exponents

EXAMPLE

Read the number. Change the number into a problem and write the amount.

$$2^3 = 2 \times 2 \times 2 = \underline{\quad 8 \quad}$$

Directions Express the following without exponents.

- | | | |
|-------------------|--------------------|---------------------|
| 1. $3^2 =$ _____ | 21. $20^3 =$ _____ | 41. $4^5 =$ _____ |
| 2. $4^2 =$ _____ | 22. $3^2 =$ _____ | 42. $21^2 =$ _____ |
| 3. $5^3 =$ _____ | 23. $5^4 =$ _____ | 43. $3^3 =$ _____ |
| 4. $4^3 =$ _____ | 24. $12^2 =$ _____ | 44. $10^6 =$ _____ |
| 5. $6^2 =$ _____ | 25. $10^3 =$ _____ | 45. $23^2 =$ _____ |
| 6. $10^2 =$ _____ | 26. $3^5 =$ _____ | 46. $14^2 =$ _____ |
| 7. $8^2 =$ _____ | 27. $22^3 =$ _____ | 47. $50^2 =$ _____ |
| 8. $2^5 =$ _____ | 28. $17^2 =$ _____ | 48. $100^2 =$ _____ |

Name _____

Date _____

Period _____

Workbook Activity

Chapter 1, Lesson 9

16

Order of Operations

EXAMPLE

Follow the order of operations.

$$2 + 4 \times 2 = \underline{\quad \quad}$$

$$2 + 8 = \underline{\quad 10 \quad}$$

Directions Find the answers. Perform the operations in the correct order.

- | | |
|--|---|
| 1. $3 + 5 \times 6 =$ _____ | 21. $8 \times 6 \div 4 - 12 \div 6 =$ _____ |
| 2. $3 \times 4 + 6 - 4 =$ _____ | 22. $2^3 \times 3 \div 6 + 12 - 3 =$ _____ |
| 3. $4 \times 8 + 16 \div 2 =$ _____ | 23. $45 \div 15 + 10 - 2^3 =$ _____ |
| 4. $5 \times 2 - 6 \div 2 =$ _____ | 24. $15 \div 3 - 5 + 10^2 =$ _____ |
| 5. $4^2 \times 2 + 5 - 32 =$ _____ | 25. $12^2 \div 6 - 20 + 7 =$ _____ |
| 6. $3 \times 2 \times 2^3 - 4^2 =$ _____ | 26. $8^2 + 9 \times 3 - 10 =$ _____ |
| 7. $7 + 6 \times 2 - 2 + 2^3 =$ _____ | 27. $18 \div 3^2 - 2 + 5^2 =$ _____ |

Factors

EXAMPLE

Factor the number.

$$F_{15} \quad 1 \times 15$$
$$3 \times 5$$

Choose the correct factors.

- a. 1, 5, 10, 15
b. 1, 2, 3, 5
c. 1, 3, 5, 15
d. 1, 3, 6, 12

Directions Circle the answer that has the correct factors.**1.** 24

- a. 1, 2, 4, 6, 8, 12, 14
b. 1, 2, 4, 10, 12, 24
c. 1, 2, 3, 4, 6, 8, 12, 24
d. 2, 4, 6, 8, 10, 12, 24

6. 52

- a. 1, 12, 24, 26, 30, 52
b. 26, 52
c. 1, 2, 4, 13, 26, 52
d. 1, 13, 15, 52

11. 36

- a. 2, 3, 4, 6, 8, 12, 24
b. 1, 2, 3, 4, 6, 9, 12, 18, 36
c. 1, 2, 4, 6, 8, 12, 36
d. 1, 3, 4, 6, 8, 12, 36

2. 16

- a. 1, 4, 8, 16
b. 1, 2, 4, 16
c. 1, 2, 4, 8, 16
d. 1, 2, 4, 8, 16, 32

7. 14

- a. 2, 7, 11, 14
b. 1, 2, 7, 14, 28
c. 2, 4, 7, 14
d. 1, 2, 7, 14

12. 12

- a. 2, 3, 4, 6, 12
b. 3, 4, 6, 12, 24
c. 2, 4, 6, 24
d. 1, 2, 3, 4, 6, 12

3. 32

- a. 1, 2, 8, 16, 32
b. 1, 2, 8, 16, 32, 64
c. 1, 2, 4, 8, 16, 32
d. 2, 4, 6, 8, 10, 32

8. 42

- a. 1, 6, 7, 12, 21, 42
b. 1, 2, 3, 6, 7, 14, 21, 42
c. 1, 6, 12, 42
d. 1, 2, 4, 12, 21, 42

13. 18

- a. 1, 2, 3, 6, 9, 18
b. 1, 2, 3, 6, 9, 18, 32
c. 1, 2, 3, 6, 9, 18, 36
d. 1, 2, 3, 4, 6, 7, 18

4. 8

- a. 2, 4, 8
b. 1, 2, 4, 8
c. 1, 2, 4, 8, 16
d. 1, 2, 4, 8, 12, 24

9. 13

- a. 1, 7, 13
b. 1, 13
c. 1, 7, 13, 26
d. 1, 2, 13, 19

14. 20

- a. 2, 20
b. 2, 5, 10, 15, 20
c. 1, 2, 5, 10, 15, 20
d. 1, 2, 4, 5, 10, 20

5. 10

- a. 2, 5
b. 1, 2, 5, 10
c. 1, 2, 5, 10, 20
d. 1, 2, 5

10. 26

- a. 1, 2, 20, 26
b. 1, 13, 26
c. 1, 2, 13, 26
d. 1, 26

15. 22

- a. 1, 11, 22
b. 1, 11, 22, 44
c. 1, 2, 11, 22
d. 1, 22, 44



Prime and Composite Numbers

EXAMPLE

Identify all the factors of a number. $F_9 = 1, 3, 9$

Tell whether the number is a prime or composite number.

9 has three factors, so it is a composite number.

Directions Write *prime* or *composite* for each number given.

1. 23 _____

2. 25 _____

3. 45 _____

4. 19 _____

5. 84 _____

6. 29 _____

7. 73 _____

8. 37 _____

9. 55 _____

10. 78 _____

11. 15 _____

12. 220 _____

13. 110 _____

14. 6 _____

15. 120 _____

Working with Fractions

EXAMPLE

Divide to find out how many times one denominator goes into the other.
Multiply the numerator by the quotient.

$$\frac{2}{5} = \frac{\quad}{25} \quad \text{Divide 25 by 5. } 25 \div 5 = 5$$

$$\frac{2}{5} \times \frac{5}{5} = \frac{10}{25}$$

$$\frac{2}{5} = \frac{10}{25}$$

Directions Express these fractions in higher terms.

1. $\frac{3}{5} = \frac{\quad}{50}$

5. $\frac{7}{8} = \frac{\quad}{56}$

10. $\frac{5}{11} = \frac{\quad}{121}$

13. $\frac{2}{3} = \frac{\quad}{18}$

2. $\frac{1}{3} = \frac{\quad}{18}$

6. $\frac{3}{7} = \frac{\quad}{21}$

11. $\frac{4}{9} = \frac{\quad}{72}$

14. $\frac{7}{10} = \frac{\quad}{80}$

3. $\frac{5}{6} = \frac{\quad}{24}$

7. $\frac{2}{9} = \frac{\quad}{36}$

12. $\frac{3}{11} = \frac{\quad}{44}$

15. $\frac{3}{4} = \frac{\quad}{16}$

4. $\frac{7}{8} = \frac{\quad}{32}$

8. $\frac{1}{5} = \frac{\quad}{30}$

9. $\frac{1}{4} = \frac{\quad}{20}$

Mixed Numbers

EXAMPLE

Rename $1\frac{2}{3}$ as an improper fraction $3 \times 1 = 3$ $3 + 2 = 5$ $1\frac{2}{3} = \frac{5}{3}$

Multiply the whole number by the denominator. Then, add the numerator.
Write the new numerator over the same denominator.

Directions Rename these mixed numbers as improper fractions.

1. $2\frac{1}{6} =$ _____

6. $3\frac{2}{5} =$ _____

11. $1\frac{5}{9} =$ _____

2. $1\frac{1}{2} =$ _____

7. $1\frac{1}{6} =$ _____

12. $13\frac{2}{7} =$ _____

3. $2\frac{1}{5} =$ _____

8. $9\frac{2}{7} =$ _____

13. $20\frac{1}{2} =$ _____

4. $1\frac{5}{6} =$ _____

9. $4\frac{3}{4} =$ _____

14. $6\frac{2}{9} =$ _____

5. $4\frac{1}{5} =$ _____

10. $2\frac{5}{11} =$ _____

15. $3\frac{4}{7} =$ _____

Renaming Improper Fractions

EXAMPLE

Express the improper fractions as mixed numbers.
Divide the numerator by the denominator.
Simplify if necessary.

$$\frac{78}{9}$$

$$\begin{array}{r} 8 \\ 9 \overline{)78} \\ \underline{-72} \\ 6 \end{array}$$

remainder is 6

Solution: $8\frac{6}{9}$ or $8\frac{2}{3}$

Directions Rename the improper fractions as mixed numbers.
Simplify if necessary.

1. $\frac{15}{7} =$ _____

9. $\frac{57}{8} =$ _____

17. $\frac{18}{11} =$ _____

25. $\frac{53}{10} =$ _____

2. $\frac{29}{6} =$ _____

10. $\frac{53}{23} =$ _____

18. $\frac{72}{18} =$ _____

26. $\frac{34}{12} =$ _____

3. $\frac{51}{30} =$ _____

11. $\frac{77}{10} =$ _____

19. $\frac{71}{14} =$ _____

27. $\frac{63}{8} =$ _____

Dividing Fractions

EXAMPLE

Invert the divisor. Multiply. Simplify if necessary.

$$\frac{2}{5} \div \frac{3}{7} =$$

$$\frac{2}{5} \times \frac{7}{3} = \frac{14}{15}$$

Directions Divide these fractions. Remember to invert the divisor.
Show your work. See the example.

1. $\frac{3}{10} \div \frac{4}{5} =$

8. $\frac{7}{10} \div \frac{10}{15} =$

15. $\frac{4}{5} \div \frac{16}{20} =$

2. $\frac{13}{12} \div \frac{15}{18} =$

9. $\frac{2}{7} \div \frac{7}{8} =$

16. $\frac{1}{6} \div \frac{5}{12} =$

3. $\frac{5}{9} \div \frac{8}{12} =$

10. $\frac{1}{7} \div \frac{3}{14} =$

17. $\frac{1}{5} \div \frac{3}{5} =$

4. $\frac{7}{5} \div \frac{10}{15} =$

11. $\frac{9}{14} \div \frac{18}{21} =$

18. $\frac{14}{15} \div \frac{14}{15} =$

5. $\frac{4}{12} \div \frac{6}{8} =$

12. $\frac{12}{14} \div \frac{6}{7} =$

19. $\frac{3}{7} \div \frac{9}{10} =$

6. $\frac{8}{9} \div \frac{6}{7} =$

13. $\frac{8}{9} \div \frac{6}{9} =$

20. $\frac{14}{16} \div \frac{15}{20} =$

7. $\frac{5}{12} \div \frac{7}{8} =$

14. $\frac{6}{7} \div \frac{2}{9} =$



Answers

KEY

Workbook Activity 8—Multiplication by Powers of Ten

1. 3,250 2. 42,100 3. 46,310 4. 602,300 5. 70,200 6. 3,011,000
22. 906,000 23. 1,080,200 24. 10,400 25. 560 26. 1,300

Workbook Activity 9—Multiplication of Whole Numbers

1. 528 2. 1,098 3. 8,643 4. 6,120 5. 46,992 15. 666,080 16. 279,056 17. 927,447
18. 510,400 19. 457,600

Workbook Activity 10—Division of Whole Numbers

1. 32 2. 53 3. 38 4. 96
15. 506 16. 804 17. 2,010 18. 900

Workbook Activity 12—Dividing Numbers by Powers of Ten

1. 84 2. 650 3. 20 4. 463 5. 96 6. 140 7. 19,100 8. 9,200

21. 451
22. 39,000 23. 6,800 24. 406,030 25. 1,960 26. 9,603 27. 50,000
28. 700,000

Workbook Activity 15—Exponents

1. 9 2. 16 3. 125 4. 64 5. 36 6. 100 7. 64 8. 32

21. 8,000 22. 9 23. 625 24. 144

25. 1,000 26. 243 27. 10,648 28. 289

41. 1,024 42. 441 43. 27 44. 1,000,000
45. 529 46. 196 47. 2,500 48. 10,000

Workbook Activity 16—Order of Operations

1. 33 2. 14 3. 40 4. 7 5. 5 6. 32 7. 25

21. 10 22. 13 23. 5 24. 100 25. 11 26. 81 27. 25

Workbook Activity 17—Factors

1. c 2. c 3. c 4. b 5. b 6. c 7. d 8. b 9. b 10. c 11. b 12. d
13. a 14. d 15. c

Workbook Activity 19—Prime and Composite Numbers

1. prime 2. composite 3. composite 4. prime 5. composite
6. prime 7. prime 8. prime 9. composite 10. composite
11. composite 12. composite 13. composite 14. composite
15. composite

Workbook Activity 28—Working with Fractions

1. 30 2. 6 3. 20 4. 28 5. 49 6. 9 7. 8 8. 6 9. 5 10. 55 11. 32
12. 12 13. 12 14. 56 15. 12

Workbook Activity 30—Mixed Numbers

1. $\frac{13}{6}$ 2. $\frac{3}{2}$ 3. $\frac{11}{5}$ 4. $\frac{11}{6}$ 5. $\frac{21}{5}$ 6. $\frac{17}{5}$ 7. $\frac{7}{6}$ 8. $\frac{65}{7}$ 9. $\frac{19}{4}$ 10. $\frac{27}{11}$ 11. $\frac{14}{9}$
12. $\frac{93}{7}$ 13. $\frac{41}{2}$ 14. $\frac{56}{9}$ 15. $\frac{25}{7}$

Workbook Activity 31—Renaming Improper Fractions

1. $2\frac{1}{7}$ 2. $4\frac{5}{6}$ 3. $1\frac{7}{10}$

9. $7\frac{1}{8}$ 10. $2\frac{7}{23}$ 11. $7\frac{7}{10}$

17. $1\frac{7}{11}$ 18. 4 19. $5\frac{1}{14}$

25. $5\frac{3}{10}$ 26. $2\frac{5}{6}$ 27. $7\frac{7}{8}$

Workbook Activity 35—Dividing Fractions

1. $\frac{3}{10} \times \frac{5}{4} = \frac{15}{40} = \frac{3}{8}$ 2. $\frac{13}{12} \times \frac{18}{15} = \frac{234}{180} = \frac{13}{10}$ 3. $\frac{5}{9} \times \frac{12}{8} = \frac{60}{72} = \frac{5}{6}$
4. $\frac{7}{5} \times \frac{15}{10} = \frac{105}{50} = \frac{21}{10}$ 5. $\frac{4}{12} \times \frac{8}{6} = \frac{32}{72} = \frac{4}{9}$ 6. $\frac{8}{9} \times \frac{7}{6} = \frac{56}{54} = \frac{28}{27}$
7. $\frac{5}{12} \times \frac{8}{7} = \frac{40}{84} = \frac{10}{21}$ 8. $\frac{7}{10} \times \frac{15}{10} = \frac{105}{100} = \frac{21}{20}$ 9. $\frac{2}{7} \times \frac{8}{7} = \frac{16}{49}$ 10. $\frac{1}{7}$
 $\times \frac{14}{3} = \frac{14}{21} = \frac{2}{3}$ 11. $\frac{9}{14} \times \frac{21}{18} = \frac{189}{252} = \frac{3}{4}$ 12. $\frac{12}{14} \times \frac{7}{6} = \frac{84}{84} = 1$
13. $\frac{8}{9} \times \frac{9}{6} = \frac{72}{54} = \frac{4}{3}$ 14. $\frac{6}{7} \times \frac{9}{2} = \frac{54}{14} = \frac{27}{7}$ 15. $\frac{4}{5} \times \frac{20}{16} = \frac{80}{80} = 1$
16. $\frac{1}{6} \times \frac{12}{5} = \frac{12}{30} = \frac{2}{5}$ 17. $\frac{1}{5} \times \frac{5}{3} = \frac{5}{15} = \frac{1}{3}$ 18. $\frac{14}{15} \times \frac{15}{14} = \frac{210}{210} = 1$
19. $\frac{3}{7} \times \frac{10}{9} = \frac{30}{63} = \frac{10}{21}$ 20. $\frac{14}{16} \times \frac{20}{15} = \frac{280}{240} = \frac{7}{6}$

22

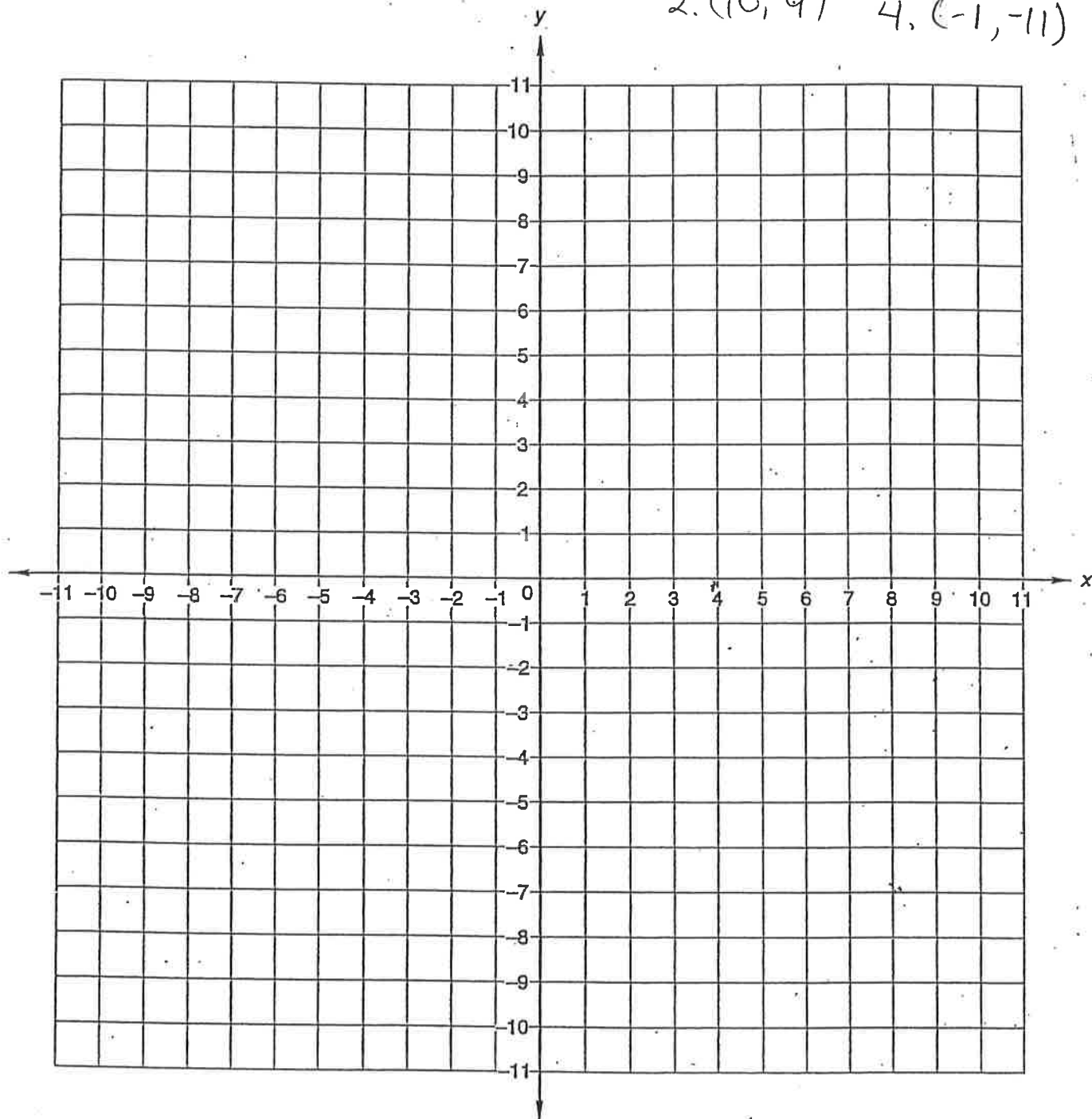
Coordinate Plane

For use with Investigation 10

Name _____

Practice co-ordinates:

- ★ (x, y)
1. (4, -7)
 2. (10, 9)
 3. (-8, 6)
 4. (-1, -11)



* make up some
or design shapes

FACTS PRACTICE TEST

C

100 Multiplication Facts

Name _____

Time _____

Multiply.

[illegible]

D

90 Division Facts

Name _____

Time _____

Divide.

$7\overline{)21}$	$2\overline{)10}$	$6\overline{)42}$	$1\overline{)3}$	$4\overline{)24}$	$3\overline{)6}$	$9\overline{)54}$	$6\overline{)18}$	$4\overline{)0}$	$5\overline{)30}$
$4\overline{)32}$	$8\overline{)56}$	$1\overline{)0}$	$6\overline{)12}$	$3\overline{)18}$	$9\overline{)72}$	$5\overline{)15}$	$2\overline{)8}$	$7\overline{)42}$	$6\overline{)36}$
$6\overline{)0}$	$5\overline{)10}$	$9\overline{)9}$	$2\overline{)6}$	$7\overline{)63}$	$4\overline{)16}$	$8\overline{)48}$	$1\overline{)2}$	$5\overline{)35}$	$3\overline{)21}$
$2\overline{)18}$	$6\overline{)6}$	$3\overline{)15}$	$8\overline{)40}$	$2\overline{)0}$	$5\overline{)20}$	$9\overline{)27}$	$1\overline{)8}$	$4\overline{)4}$	$7\overline{)35}$
$4\overline{)20}$	$9\overline{)63}$	$1\overline{)4}$	$7\overline{)14}$	$3\overline{)3}$	$8\overline{)24}$	$5\overline{)0}$	$6\overline{)24}$	$8\overline{)8}$	$2\overline{)16}$
$5\overline{)5}$	$8\overline{)64}$	$3\overline{)0}$	$4\overline{)28}$	$7\overline{)49}$	$2\overline{)4}$	$9\overline{)81}$	$3\overline{)12}$	$6\overline{)30}$	$1\overline{)5}$
$8\overline{)32}$	$1\overline{)1}$	$9\overline{)36}$	$3\overline{)27}$	$2\overline{)14}$	$5\overline{)25}$	$6\overline{)48}$	$8\overline{)0}$	$7\overline{)28}$	$4\overline{)36}$
$2\overline{)12}$	$5\overline{)45}$	$1\overline{)7}$	$4\overline{)8}$	$7\overline{)0}$	$8\overline{)16}$	$3\overline{)24}$	$9\overline{)45}$	$1\overline{)9}$	$6\overline{)54}$
$7\overline{)56}$	$9\overline{)0}$	$8\overline{)72}$	$2\overline{)2}$	$5\overline{)40}$	$3\overline{)9}$	$9\overline{)18}$	$1\overline{)6}$	$4\overline{)12}$	$7\overline{)7}$

G

48 Uneven Divisions

Name _____

Time _____

Divide. Write each answer with a remainder.

$4\overline{)15}$	$9\overline{)14}$	$7\overline{)45}$	$3\overline{)16}$	$6\overline{)38}$	$2\overline{)7}$
$8\overline{)50}$	$5\overline{)28}$	$4\overline{)21}$	$6\overline{)15}$	$7\overline{)11}$	$8\overline{)20}$
$3\overline{)20}$	$7\overline{)32}$	$8\overline{)30}$	$2\overline{)15}$	$5\overline{)43}$	$6\overline{)35}$
$9\overline{)62}$	$4\overline{)10}$	$6\overline{)27}$	$9\overline{)21}$	$4\overline{)19}$	$3\overline{)25}$
$6\overline{)56}$	$2\overline{)17}$	$3\overline{)10}$	$5\overline{)8}$	$9\overline{)40}$	$7\overline{)30}$
$2\overline{)5}$	$8\overline{)25}$	$5\overline{)17}$	$7\overline{)17}$	$3\overline{)8}$	$4\overline{)9}$
$7\overline{)20}$	$6\overline{)10}$	$2\overline{)9}$	$4\overline{)30}$	$8\overline{)15}$	$9\overline{)29}$
$5\overline{)32}$	$3\overline{)14}$	$9\overline{)50}$	$8\overline{)65}$	$2\overline{)11}$	$5\overline{)19}$

FACTS PRACTICE TEST

H

60 Improper Fractions to Simplify

Name _____

Time _____

Simplify.

$\frac{15}{2} =$	$\frac{9}{8} =$	$\frac{10}{2} =$	$\frac{18}{6} =$	$\frac{8}{3} =$	$\frac{12}{4} =$
$\frac{10}{10} =$	$\frac{3}{2} =$	$\frac{11}{4} =$	$\frac{4}{3} =$	$\frac{12}{5} =$	$\frac{5}{4} =$
$\frac{12}{6} =$	$\frac{9}{3} =$	$\frac{5}{5} =$	$\frac{15}{4} =$	$\frac{6}{2} =$	$\frac{9}{9} =$
$\frac{3}{3} =$	$\frac{7}{4} =$	$\frac{21}{10} =$	$\frac{11}{2} =$	$\frac{7}{6} =$	$\frac{24}{8} =$
$\frac{11}{3} =$	$\frac{9}{5} =$	$\frac{4}{2} =$	$\frac{21}{8} =$	$\frac{6}{5} =$	$\frac{12}{3} =$
$\frac{7}{2} =$	$\frac{25}{6} =$	$\frac{10}{9} =$	$\frac{4}{4} =$	$\frac{12}{2} =$	$\frac{16}{15} =$
$\frac{10}{5} =$	$\frac{5}{2} =$	$\frac{7}{3} =$	$\frac{8}{4} =$	$\frac{8}{8} =$	$\frac{27}{10} =$
$\frac{16}{4} =$	$\frac{6}{6} =$	$\frac{25}{12} =$	$\frac{5}{3} =$	$\frac{7}{5} =$	$\frac{16}{9} =$
$\frac{15}{8} =$	$\frac{10}{3} =$	$\frac{33}{10} =$	$\frac{2}{2} =$	$\frac{35}{6} =$	$\frac{25}{8} =$
$\frac{6}{3} =$	$\frac{8}{5} =$	$\frac{9}{4} =$	$\frac{12}{12} =$	$\frac{25}{2} =$	$\frac{9}{2} =$

FACTS PRACTICE TEST

I

40 Fractions to Reduce

Name _____

Time _____

Reduce each fraction to lowest terms.

$\frac{2}{10} =$	$\frac{8}{16} =$	$\frac{2}{6} =$	$\frac{10}{100} =$	$\frac{6}{8} =$
$\frac{10}{15} =$	$\frac{5}{10} =$	$\frac{8}{12} =$	$\frac{9}{15} =$	$\frac{4}{16} =$
$\frac{2}{8} =$	$\frac{4}{10} =$	$\frac{15}{20} =$	$\frac{4}{8} =$	$\frac{4}{6} =$
$\frac{6}{15} =$	$\frac{4}{12} =$	$\frac{25}{100} =$	$\frac{10}{25} =$	$\frac{12}{20} =$
$\frac{20}{100} =$	$\frac{6}{9} =$	$\frac{2}{4} =$	$\frac{3}{12} =$	$\frac{3}{15} =$
$\frac{3}{9} =$	$\frac{2}{12} =$	$\frac{6}{10} =$	$\frac{12}{16} =$	$\frac{50}{100} =$
$\frac{9}{12} =$	$\frac{3}{6} =$	$\frac{5}{15} =$	$\frac{10}{12} =$	$\frac{8}{24} =$
$\frac{12}{15} =$	$\frac{8}{10} =$	$\frac{75}{100} =$	$\frac{6}{12} =$	$\frac{12}{24} =$

K

**30 Percents to Write
as Fractions**

Name _____

Time _____

Write each percent as a reduced fraction.

1% =	20% =	55% =	90% =	75% =
99% =	5% =	95% =	80% =	12% =
70% =	65% =	50% =	2% =	48% =
24% =	25% =	98% =	40% =	15% =
60% =	30% =	4% =	35% =	36% =
45% =	8% =	10% =	21% =	85% =

2	9	9	3	13	9	12	13	9	12
<u>- 1</u>	<u>- 8</u>	<u>- 6</u>	<u>- 3</u>	<u>- 9</u>	<u>- 7</u>	<u>- 3</u>	<u>- 6</u>	<u>- 2</u>	<u>- 8</u>

11	5	6	12	2	4	16	4	13	9
<u>- 7</u>	<u>- 0</u>	<u>- 1</u>	<u>- 6</u>	<u>- 0</u>	<u>- 3</u>	<u>- 8</u>	<u>- 1</u>	<u>- 8</u>	<u>- 0</u>

7	11	5	12	14	8	5	7	9	3
<u>- 7</u>	<u>- 4</u>	<u>- 4</u>	<u>- 9</u>	<u>- 7</u>	<u>- 4</u>	<u>- 3</u>	<u>- 5</u>	<u>- 1</u>	<u>- 0</u>

8	6	10	9	10	11	7	14	6	0
<u>- 0</u>	<u>- 4</u>	<u>- 5</u>	<u>- 3</u>	<u>- 1</u>	<u>- 6</u>	<u>- 3</u>	<u>- 9</u>	<u>- 6</u>	<u>- 0</u>

10	17	15	8	9	11	14	8	10	6
<u>- 4</u>	<u>- 9</u>	<u>- 8</u>	<u>- 5</u>	<u>- 5</u>	<u>- 9</u>	<u>- 6</u>	<u>- 1</u>	<u>- 2</u>	<u>- 2</u>

17	8	4	8	5	1	7	13	7	10
<u>- 8</u>	<u>- 8</u>	<u>- 2</u>	<u>- 7</u>	<u>- 1</u>	<u>- 1</u>	<u>- 6</u>	<u>- 5</u>	<u>- 0</u>	<u>- 9</u>

5	3	12	12	15	6	13	11	12	8
<u>- 2</u>	<u>- 2</u>	<u>- 7</u>	<u>- 4</u>	<u>- 9</u>	<u>- 3</u>	<u>- 4</u>	<u>- 8</u>	<u>- 5</u>	<u>- 6</u>

10	13	4	6	15	2	3	8	8	14
<u>- 6</u>	<u>- 7</u>	<u>- 4</u>	<u>- 5</u>	<u>- 6</u>	<u>- 2</u>	<u>- 1</u>	<u>- 2</u>	<u>- 3</u>	<u>- 8</u>

14	10	1	4	7	10	5	11	16	6
- 5	- 7	- 0	- 0	- 1	- 3	- 5	- 3	- 9	- 0

9	11	9	15	7	7	18	11	10	16
- 9	- 5	- 4	- 7	- 2	- 4	- 9	- 2	- 8	- 7

$0 \div 1 =$	$8 \div 1 =$	$20 \div 5 =$	$54 \div 6 =$	$9 \div 1 =$
$16 \div 4 =$	$27 \div 3 =$	$6 \div 6 =$	$36 \div 4 =$	$24 \div 6 =$
$6 \div 2 =$	$48 \div 8 =$	$12 \div 6 =$	$2 \div 2 =$	$4 \div 2 =$
$0 \div 7 =$	$0 \div 5 =$	$40 \div 5 =$	$0 \div 2 =$	$48 \div 6 =$
$8 \div 8 =$	$1 \div 1 =$	$10 \div 5 =$	$27 \div 9 =$	$3 \div 3 =$
$14 \div 2 =$	$12 \div 2 =$	$2 \div 1 =$	$24 \div 8 =$	$6 \div 3 =$
$25 \div 5 =$	$0 \div 6 =$	$18 \div 9 =$	$15 \div 5 =$	$28 \div 4 =$
$15 \div 3 =$	$63 \div 7 =$	$42 \div 7 =$	$0 \div 3 =$	$36 \div 6 =$
$20 \div 4 =$	$40 \div 8 =$	$49 \div 7 =$	$5 \div 5 =$	$4 \div 4 =$
$0 \div 1 =$	$18 \div 6 =$	$7 \div 7 =$	$32 \div 8 =$	$45 \div 5 =$
$56 \div 8 =$	$35 \div 5 =$	$16 \div 2 =$	$24 \div 4 =$	$24 \div 3 =$
$28 \div 7 =$	$4 \div 1 =$	$8 \div 2 =$	$5 \div 1 =$	$0 \div 4 =$
$21 \div 7 =$	$81 \div 9 =$	$9 \div 3 =$	$10 \div 2 =$	$14 \div 7 =$
$72 \div 8 =$	$18 \div 3 =$	$45 \div 9 =$	$16 \div 8 =$	$8 \div 4 =$
$63 \div 9 =$	$35 \div 7 =$	$0 \div 9 =$	$9 \div 9 =$	$32 \div 4 =$
$18 \div 2 =$	$30 \div 5 =$	$54 \div 9 =$	$6 \div 1 =$	$0 \div 8 =$
$72 \div 9 =$	$21 \div 3 =$	$36 \div 9 =$	$3 \div 1 =$	$30 \div 6 =$
$56 \div 7 =$	$12 \div 4 =$	$12 \div 3 =$	$64 \div 8 =$	$42 \div 6 =$

