

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Write as an improper fraction.

1) _____

$$5\frac{7}{8}$$

A) $\frac{8}{47}$

B) $\frac{40}{8}$

C) $\frac{280}{8}$

D) $\frac{47}{8}$

2) Write as an improper fraction.

2) _____

$$3\frac{1}{5}$$

A) $\frac{16}{5}$

B) $\frac{5}{16}$

C) $\frac{15}{5}$

D) $\frac{5}{15}$

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

3) Write as an improper fraction.

3) _____

$$3\frac{1}{5}$$

4) Write as an improper fraction.

4) _____

$$5\frac{5}{8}$$

5) Write as an improper fraction.

5) _____

$$4\frac{4}{9}$$

6) Write as an improper fraction.

6) _____

$$6$$

7) Write as an improper fraction.

7) _____

$$2\frac{5}{12}$$

8) Write as an improper fraction.

8) _____

$$12\frac{13}{32}$$

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

9) Write as a mixed number.

9) _____

$$\frac{65}{9}$$

A) $17\frac{9}{2}$

B) $7\frac{9}{2}$

C) $7\frac{2}{9}$

D) $17\frac{2}{9}$

10) Write as a mixed number.

10) _____

$$\frac{53}{6}$$

A) $6\frac{5}{6}$

B) $8\frac{5}{6}$

C) $8\frac{6}{5}$

D) $6\frac{6}{5}$

11) Write the following fraction in lowest terms.

11) _____

$$\frac{9}{15}$$

A) $\frac{5}{3}$

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

C) $\frac{9}{5}$

D) $\frac{3}{15}$

12) Write the following fraction in lowest terms.

12) _____

$$\frac{96}{132}$$

A) $\frac{8}{11}$

B) $\frac{11}{8}$

C) $\frac{16}{11}$

D) $\frac{8}{22}$

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

13) Write as a mixed number in lowest terms.

13) _____

$$\frac{4}{3}$$

14) Write as a mixed number in lowest terms.

14) _____

$$\frac{38}{8}$$

15) Write as a mixed number in lowest terms.

15) _____

$$\frac{23}{2}$$

16) Write as a mixed number in lowest terms.

16) _____

$$\frac{98}{16}$$

17) Write as a mixed number in lowest terms.

17) _____

$$\frac{84}{13}$$

18) Reduce to lowest terms.

18) _____

$$\frac{14}{20}$$

19) Reduce to lowest terms.

19) _____

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

20) Reduce to lowest terms.

$$5\frac{20}{32}$$

20) _____

21) Reduce to lowest terms.

$$\frac{45}{27}$$

21) _____

22) Reduce to lowest terms.

$$\frac{20}{45}$$

22) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

23) Complete the fraction.

$$\frac{5}{12} = \frac{?}{48}$$

23) _____

A) 30

B) 25

C) 15

D) 20

24) Complete the fraction.

$$\frac{3}{16} = \frac{?}{144}$$

24) _____

A) 30

B) 24

C) 33

D) 27

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

25) $\frac{60}{45} = \frac{?}{15}$

25) _____

26) $\frac{9}{3} = \frac{?}{12}$

26) _____

27) $1\frac{10}{12} = \frac{?}{6}$

27) _____

28) $5 = \frac{?}{4}$

28) _____

29) $2\frac{6}{8} = \frac{?}{24}$

29) _____

30) $12\frac{5}{16} = \frac{?}{32}$

30) _____

31) Choose the larger number.

$$\frac{3}{4} \text{ or } \frac{3}{8}$$

31) _____

32) Choose the larger number.

$$2\frac{4}{5} \text{ or } \frac{30}{10}$$

32) _____

33) Choose the larger number.

$$\frac{5}{16} \text{ or } \frac{24}{80}$$

33) _____

34) Choose the larger number.

$$\frac{3}{8} \text{ or } \frac{1}{4}$$

34) _____

35) Choose the larger number.

$$1\frac{3}{16} \text{ or } 2\frac{1}{2}$$

35) _____

36) Choose the larger number.

$$\frac{12}{5} \text{ or } 2\frac{7}{17}$$

36) _____

37)

37) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

38) Multiply and write the answer in lowest terms.

38) _____

$$\frac{3}{4} \times \frac{5}{6} \times \frac{2}{3} =$$

A) $\frac{5}{12}$

B) $\frac{10}{24}$

C) $\frac{15}{18}$

D) $\frac{30}{48}$

39) Multiply and write the answer in lowest terms.

39) _____

$$6\frac{1}{4} \times 3\frac{1}{5} =$$

A) $\frac{1}{20}$

B) 20

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

D) $18\frac{1}{20}$

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

40) Write the product in lowest terms.

40) _____

$$\frac{7}{8} \times \frac{1}{3} =$$

41) Write the product in lowest terms.

41) _____

$$5 \times \frac{3}{25} =$$

42) Write the product in lowest terms.

$$\frac{2}{9} \times \frac{6}{16} =$$

42) _____

43) Write the product in lowest terms.

$$\frac{3}{7} \times \frac{5}{8} =$$

43) _____

44) Write the product in lowest terms.

$$\frac{4}{5} \times 6 =$$

44) _____

45) Write the product in lowest terms.

$$5\frac{1}{2} \times \frac{2}{3} =$$

45) _____

46) Write the product in lowest terms.

$$6\frac{1}{8} \times 9\frac{1}{7} =$$

46) _____

47) Write the product in lowest terms.

$$8\frac{1}{3} \times 3 =$$

47) _____

48) Write the product in lowest terms.

$$3\frac{3}{4} \times \frac{2}{5} =$$

48) _____

49) Write the product in lowest terms.

$$1\frac{5}{9} \times \frac{2}{3} \times \frac{3}{7} =$$

49) _____

50) Write the product in lowest terms.

$$\frac{4}{7} \times 3 \times \frac{7}{4} =$$

50) _____

51) Write the product in lowest terms.

$$\frac{5}{18} \times 5\frac{2}{5} =$$

51) _____

52) Write the product in lowest terms.

$$7 \times 3\frac{1}{2} =$$

52) _____

53) Write the product in lowest terms.

$$\frac{49}{3} \times \frac{4}{14} =$$

53) _____

54) Write the product in lowest terms.

54) _____

$$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} =$$

55) Write the product in lowest terms.

55) _____

$$2\frac{3}{4} \times 5\frac{5}{8} =$$

56) A carpenter has two boards. The first is $13\frac{1}{2}$ ft long. The second is $\frac{1}{3}$ the length of the first.
How long is the second board?

56) _____

57) A car averages 30 miles per gallon of gas. If its gas tank holds $12\frac{1}{2}$ gallons of gas, how far
will the car travel on a full tank of gas?

57) _____

58) An electrician uses 16 lengths of wire that are $5\frac{5}{8}$ in. each. What is the total length of wire
used?

58) _____

59) A painter used $5\frac{1}{3}$ cans of paint. Each can held $3\frac{1}{2}$ quarts. How much paint did he use?

59) _____

60) A 20-gallon drum of oil leaked $\frac{3}{5}$ of its contents. How many gallons remained in the
drum?

60) _____

61) An oil tank holds 280 gallons of oil. On March 1st, the gauge showed it to be $\frac{7}{8}$ full. At the
end of the month, the tank was $\frac{1}{4}$ full. How much oil was used in March?

61) _____

62) How many 38 in. boards can be cut from eight 2×4 boards that are each 10 ft long?

62) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

63) Divide and write the answer in lowest terms.

63) _____

$$\frac{21}{5} \div \frac{28}{15} =$$

A) 6

B) $\frac{4}{9}$

C) $\frac{9}{4}$

D) $2\frac{3}{4}$

64) Divide and write the answer in lowest terms.

64) _____

$$4\frac{3}{4} \div 6\frac{1}{3} =$$

A) $\frac{1}{12}$

B) 12

C) $\frac{3}{4}$

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

65) Divide and write the answer in lowest terms.

65) _____

$$48 \div \frac{16}{5} =$$

A) $\frac{5}{3}$

B) 20

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

D) 15

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

66) Write the answer in lowest terms.

66) _____

$$\frac{1}{2} \div \frac{1}{3} =$$

67) Write the answer in lowest terms.

67) _____

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

68) Write the answer in lowest terms.

68) _____

$$\frac{1}{4} \div 2\frac{2}{3} =$$

69) Write the answer in lowest terms.

69) _____

$$2\frac{1}{10} \div \frac{8}{5} =$$

70) Write the answer in lowest terms.

70) _____

$$\frac{1}{12} \div \frac{1}{18} =$$

71) Write the answer in lowest terms.

71) _____

$$\frac{5}{8} \div \frac{8}{9} =$$

72) Write the answer in lowest terms.

72) _____

$$1\frac{1}{6} \div 1\frac{2}{3} =$$

73) Write the answer in lowest terms.

73) _____

$$4 \div \frac{8}{13} =$$

74) Write the answer in lowest terms.

74) _____

$$10\frac{1}{8} \div \frac{1}{4} =$$

75) Write the answer in lowest terms.

75) _____

$$\frac{5}{16} \div \frac{3}{4} =$$

76) Write the answer in lowest terms.

$$6 \div \frac{1}{2} =$$

76) _____

77) Write the answer in lowest terms.

$$\frac{7}{12} \div 2\frac{1}{4} =$$

77) _____

78) Write the answer in lowest terms.

$$\frac{7}{8} \div 14 =$$

78) _____

79) Write the answer in lowest terms.

$$56 \div 4\frac{3}{8} =$$

79) _____

80) Write the answer in lowest terms.

$$\frac{3}{8} \div \frac{3}{8} =$$

80) _____

81) Write the answer in lowest terms.

$$\frac{13}{16} \div \frac{5}{8} =$$

81) _____

82) Write the answer in lowest terms.

$$4\frac{3}{5} \div 2\frac{5}{9} =$$

82) _____

83) How many feet are represented by a $4\frac{1}{2}$ in. line if it is drawn to a scale of $\frac{1}{4}$ in. = 1 ft?

83) _____

84) How many lengths of pipe $1\frac{1}{8}$ ft long can be cut from a pipe that is 45 ft long?

84) _____

85) On a house plan, the floor area of a room measures $4\frac{1}{4}$ in. by $3\frac{3}{8}$ in. If $\frac{1}{4}$ in. is equal to 1 ft on the drawing, what are the actual dimensions of the room?

85) _____

86) How many pieces of $4\frac{1}{2}$ in. plywood are needed to make a fence that is 36 ft long? (Hint: 12 in. = 1 ft)

86) _____

87) How many $5\frac{1}{3}$ in. risers are in a flight of stairs $6\frac{2}{3}$ ft high?

87) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

88) Add or subtract and write the answer in lowest terms.

88) _____

$$\frac{7}{32} + \frac{5}{32} + \frac{8}{32} =$$

A) $\frac{5}{8}$

B) $\frac{20}{32}$

C) $\frac{20}{96}$

D) $\frac{8}{5}$

89) Add or subtract and write the answer in lowest terms.

89) _____

$$\frac{8}{9} - \frac{7}{15} =$$

A) $\frac{19}{45}$

B) $\frac{15}{23}$

C) $\frac{45}{19}$

D) $\frac{1}{6}$

90) Add or subtract and write the answer in lowest terms.

90) _____

$$19\frac{2}{3} - 11\frac{3}{4} =$$

A) $7\frac{11}{12}$

B) $8\frac{1}{12}$

C) $17\frac{1}{12}$

D) $8\frac{1}{3}$

91) Add or subtract and write the answer in lowest terms.

91) _____

$$25\frac{7}{8} + 7\frac{1}{4} =$$

A) $33\frac{1}{8}$

B) $18\frac{6}{4}$

C) $32\frac{7}{8}$

D) $32\frac{8}{12}$

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

92) Write the answer in lowest terms.

92) _____

$$\frac{1}{8} + \frac{5}{8} =$$

93) Write the answer in lowest terms.

93) _____

$$\frac{5}{14} + \frac{9}{14} + \frac{3}{14} =$$

94) Write the answer in lowest terms.

94) _____

$$5\frac{7}{12} + 39\frac{1}{2} =$$

95) Write the answer in lowest terms.

95) _____

$$7\frac{5}{6} + 5\frac{3}{8} + 4\frac{1}{4} =$$

96) Write the answer in lowest terms.

96) _____

$$1\frac{1}{6} + 6\frac{1}{2} + 3\frac{1}{3} =$$

97) Write the answer in lowest terms.

$$\frac{1}{2} + \frac{1}{4} + \frac{2}{3} + \frac{1}{6} =$$

97) _____

98) Write the answer in lowest terms.

$$10\frac{1}{2} + 2\frac{7}{15} + 7\frac{2}{3} =$$

98) _____

99) Write the answer in lowest terms.

$$4\frac{1}{3} + 4\frac{5}{6} + 2\frac{1}{2} =$$

99) _____

100) Write the answer in lowest terms.

$$6\frac{7}{12} + 2\frac{2}{3} =$$

100) _____

101) $4\frac{1}{4} + 6\frac{5}{16} =$

101) _____

102) $3\frac{5}{12} + 4\frac{3}{8} - 2\frac{5}{6} =$

102) _____

103) Write the answer in lowest terms.

$$\frac{7}{8} - \frac{1}{2} =$$

103) _____

104) Write the answer in lowest terms.

$$19\frac{1}{4} - 8\frac{2}{3} =$$

104) _____

105) Write the answer in lowest terms.

$$10\frac{1}{2} - 6\frac{3}{4} =$$

105) _____

106) Write the answer in lowest terms.

$$23 - 12\frac{3}{8} =$$

106) _____

107) Write the answer in lowest terms.

$$6\frac{1}{6} - 4\frac{2}{6} =$$

107) _____

108) Write the answer in lowest terms.

$$3\frac{1}{3} - 2\frac{1}{7} =$$

108) _____

109) Write the answer in lowest terms.

$$2\frac{1}{3} - 1\frac{1}{2} =$$

109) _____

110) Write the answer in lowest terms.

$$3\frac{1}{5} - 2\frac{5}{6} =$$

110) _____

111) Write the answer in lowest terms.

$$6\frac{1}{2} - 2\frac{3}{5} =$$

111) _____

112) Write the answer in lowest terms.

$$5\frac{2}{3} - 3\frac{1}{4} =$$

112) _____

113) $34\frac{5}{6} - 17\frac{3}{4} =$

113) _____

114) How long a bolt is needed to go through tubing $\frac{5}{8}$ in. long, a washer $\frac{1}{16}$ in. thick, and a nut $\frac{3}{16}$ in. thick? Reduce the answer to lowest terms.

114) _____

115) A carpenter needs the following lengths of a 2×4 in. redwood: $5\frac{1}{2}$ ft, $7\frac{3}{4}$ ft, $9\frac{5}{8}$ ft, and 10 ft. How many feet of redwood should he order? Reduce the answer to lowest terms.

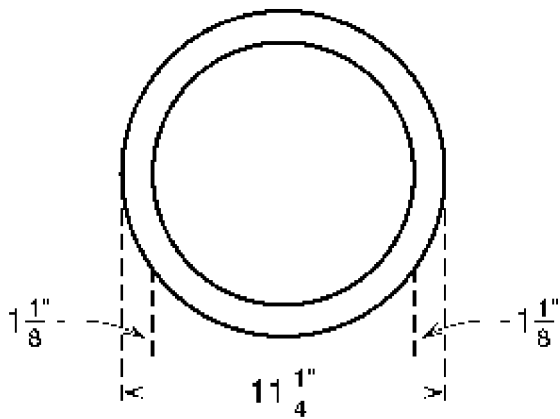
115) _____

116) A bureau that is 64 in. high has a $3\frac{1}{2}$ in. base and a $2\frac{1}{4}$ in. top. How much room is left for drawers?

116) _____

- 117) A cement pipe has an outside diameter of $11\frac{1}{4}$ in. and a wall thickness of $1\frac{1}{8}$ in. What is the inside diameter of the pipe?

117) _____



- 118) If an I-beam is to be $20\frac{5}{8}$ in. with a tolerance of $\pm\frac{3}{4}$ in., find the longest and shortest acceptable lengths.

118) _____

Answer Key

Testname: UNTITLED2

- 1) D
- 2) A
- 3) $\frac{16}{5}$
- 4) $\frac{45}{8}$
- 5) $\frac{40}{9}$
- 6) $\frac{6}{1}$
- 7) $\frac{29}{12}$
- 8) $\frac{397}{32}$
- 9) C
- 10) B
- 11) B
- 12) A
- 13) $1\frac{1}{3}$
- 14) $4\frac{3}{4}$
- 15) $11\frac{1}{2}$
- 16) $6\frac{1}{8}$
- 17) $6\frac{6}{13}$
- 18) $\frac{7}{10}$
- 19) 3
- 20) $5\frac{5}{8}$
- 21) $1\frac{2}{3}$ or $\frac{5}{3}$
- 22) $\frac{4}{9}$
- 23) D
- 24) D
- 25) $\frac{20}{15}$
- 26) $\frac{36}{12}$
- 27) $\frac{11}{6}$

Answer Key

Testname: UNTITLED2

28) $\frac{20}{4}$

29) 66

30) 394

31) $\frac{3}{4}$

32) $\frac{30}{10}$

33) $\frac{5}{16}$

34) $\frac{3}{8}$

35) $1\frac{3}{16}$

36) $2\frac{7}{17}$

37)

38) A

39) B

40) $\frac{7}{24}$

41) $\frac{3}{5}$

42) $\frac{1}{12}$

43) $\frac{15}{56}$

44) $4\frac{4}{5}$

45) $3\frac{2}{3}$

46) 56

47) 25

48) $1\frac{1}{2}$

49) $\frac{4}{9}$

50) 3

51) $1\frac{1}{2}$

52) $24\frac{1}{2}$

53) $4\frac{2}{3}$

Answer Key

Testname: UNTITLED2

54) $\frac{1}{8}$

55) $15\frac{15}{32}$

56) $4\frac{1}{2}$ ft

57) 375 miles

58) 90 in.

59) $18\frac{2}{3}$ quarts

60) 8 gallons

61) 175 gallons

62) 25 boards

63) C

64) C

65) D

66) $1\frac{1}{2}$

67) $\frac{3}{35}$

68) $\frac{3}{32}$

69) $1\frac{5}{16}$

70) $1\frac{1}{2}$

71) $\frac{45}{64}$

72) $\frac{7}{10}$

73) $6\frac{1}{2}$

74) $40\frac{1}{2}$

75) $\frac{5}{12}$

76) 12

77) $\frac{7}{27}$

78) $\frac{1}{16}$

79) $12\frac{4}{5}$

80) 1

81) $1\frac{3}{10}$

Answer Key

Testname: UNTITLED2

82) $1\frac{4}{5}$

83) 18 ft

84) 40 lengths

85) 17 ft by $13\frac{1}{2}$ ft

86) 96 pieces

87) 15 risers

88) A

89) A

90) A

91) A

92) $\frac{3}{4}$

93) $1\frac{3}{14}$

94) $45\frac{1}{2}$

95) $17\frac{11}{24}$

96) 11

97) $1\frac{7}{12}$

98) $20\frac{19}{30}$

99) $11\frac{2}{3}$

100) $9\frac{1}{4}$

101) $10\frac{9}{16}$

102) $\frac{2}{3}$

103) $\frac{3}{8}$

104) $10\frac{7}{12}$

105) $3\frac{3}{4}$

106) $10\frac{5}{8}$

107) $1\frac{5}{6}$

108) $1\frac{4}{21}$

Answer Key

Testname: UNTITLED2

109) $\frac{5}{6}$

110) $\frac{11}{30}$

111) $3\frac{9}{10}$

112) $2\frac{5}{12}$

113) $17\frac{1}{2}$

114) $\frac{7}{8}$ in.

115) $32\frac{7}{8}$ ft

116) $58\frac{1}{4}$ in.

117) 9 in.

118) Longest = $21\frac{3}{8}$ in.

Shortest = $19\frac{7}{8}$ in.