

**Test Bank for Basic College Mathematics 9th Edition by Lial
Salzman Hestwood ISBN 0321825535 9780321825537**

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MULTIPLE CHOICE. Choose the one alternative that best completes the statement to answer the question.

- 1) By examining the last digit of 3,455 only, which number is it divisible by? 1)
A)5 B)4 C)9 D)6
- 2) 6, 9, and 18 are all multiples of which number?
A)2 B)6 C)3 D)972
- 3) By only examining the last two digits of 6,380, which number is it divisible by? A)9 B)4 C)2 D)8
- 4) Which rule guarantees 927 is divisible by 3? 4) A) The last digit is even and 24 is divisible by 6.
B) The last digit is even and the sum of the digits is divisible by 3.
C) The last two digits are even.
D) The sum of the digits is divisible by 3.
- 5) Which basic arithmetic operation is implied when you use the word "factor"? 5) A) Subtraction B) Addition
C) Division D) Multiplication
- 6) Which rule guarantees 4,150 is divisible by 5? 6) A) At least two of the digits are even.
B) The remainder of consecutive digits that are divisible by 8.
C) The last three digits form a number divisible by 5.
D) The last digit is a zero.

7) 140 is divisible by which two numbers? 7) A) 5 and 3 B) 2 and 7 C) 2 and 9 D) 1

0 a nd 8

1

8) Identify the list that is a list of multiples of 25. 8) A) 25, 50, 75, 140, 175
B) 25, 75, 125, 155, 175
C) 25, 50, 100, 270, 400 D) 25, 50, 75, 100, 125

9) 3, 6, and 9 are multiples of which number? 9) A) 9 B) 2 C) 3 D) 6

10) Which of the following numbers is a composite number?

10)

A) 61 B) 34 C) 47 D) 53

11) Which is a list of the factors of 21?

11)

A) 3, 6, 9, 12, 15, 18 B) 1, 3, 7, 21

C) 1, 2, 3, 6, 9, 18 D) 2, 4, 6, 8, 10, 12, 14, 16, 18

- 12) 1 and 30, 2 and 15, 3 and 10, and 5 and 6 are all factor pairs of which number? 12)
- A)3 B)131,056 C)60 D)30
- 13) Which of the following is not a factor of 348? 13)
- A)34 B)4 C)8 D)2
- 14) Which list contains all the factor pairs of 36? 14)
- A)1(36),2(18),4(9) B)1(36),6(6)
C)1(36),2(18),3(12),4(9),6(6) D)1(36),2(18),3(12),6(6)
- 15) 15 is not a prime number because 15) use
- A) its factor pairs are 3×5 .
B) it has 1 as a factor.
C) its factor pairs are $1 \times 15, 3 \times 5$.
D) 15 is not divisible by any number except 1 and itself.
- 16) Which of the following is a prime number? 16)
- A)55 B)29 C)39 D)42
- 17) List the factor pairs of 36 and write all the factors in order from smallest to largest. 17)
- A) $1 \times 36, 6 \times 6; 1, 6, 36$
B) $1 \times 36; 1, 2, 3, 4, 6, 9, 12, 18, 36$
C) $1 \times 36, 2 \times 18, 3 \times 12, 4 \times 9, 6 \times 6; 1, 2, 3, 4, 6, 9, 12, 18, 36$
D) $1 \times 36, 3 \times 12, 6 \times 6$
- 18) Find the prime factorization of 72. 18)
- A) $1 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3$ B) $8 \cdot 9$
C) $2 \cdot 2 \cdot 2 \cdot 3 \cdot 3$ D) $2 \cdot 3 \cdot 3 \cdot 4$
- 19) Which list contains both the even numbers and odd numbers? 19)
- A)4,10,12,20,28 B)5,10,15,20,40
C)6,30,40,50,60 D)2,4,6,8,10

- 20) Determine the composite number represented by 2^3 () (20) _____
- A)180 B)108 C)540 D)30
- 21) Which number is neither a prime nor a composite? (21) _____
- A)3 B)2 C)1 D)4
- 22) Find the prime factorization of 1,260. (22) _____
- A) $1 \cdot 4 \cdot 5 \cdot 7 \cdot 9$ B) $2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 5$
- C) $2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 \cdot 7$ D) $2 \cdot 2 \cdot 2 \cdot 3 \cdot 5 \cdot 5$
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

23) Write the prime factors of 360 in exponential notation.

23) _____

- A) $2 \times 2 \times 2 \times 3 \times 3 \times 5$ B) $2^3 \times 3^2 \times 5$ C) $2 \times 2 \times 3 \times 3 \times 3 \times 5$ D) $2^2 \times 3^3 \times 5$
- ×

24) Write the prime factorization of 1,800 using exponential notation.

24) _____

- A) $2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 5 \cdot 5$ B) $2^3 \cdot 3^2 \cdot 5^2$ C) $2^3 \cdot 9 \cdot 5^2$ D) $18 \cdot 100$

25) Write the prime factorization of 120, using exponential notation.

25) _____

- A) $2^3 (3)(5)$ B) $2(2)(2)(3)(5)$ C) $2^3 (2)(2)(5)$ D) $2^4 (3)(5)$

26) Write the prime factorization of 1,800, using exponential notation.

26) _____

- $3 \ 2 \ 2 \ 2 \ 3 \ 2$
- A) $2^3 (3)(5)$ B) $2^3 (3)(5)$
- $2 \ 2$
- C) $2(3)(10)$ D) $2(2)(2)(3)(3)(5)(5)$

27) Which is the least common multiple of 6 and 9?

- A) 54 B) 9 C) 18 D) 6

32) Find the greatest common factor of 6, 9, and 10.

28) Which is the least common multiple of 4 and 15?

- A) 30 B) 60 C) 4 D) 15

- ____ A) 3 B) 1 C) 6 D) 90

29) Find the greatest common factor of 6 and 15.

- A) 90 B) 3 C) 15 D) 1

30) Find the greatest common factor of 20 and 28.

- A) 2 B) 4 C) 1 D) 140

31) Find the least common multiple of 12, 24, and 30.

- A) 6 B) 12 C) 24 D) 120

33) Which is t

he le a st co mmo n mult ip le o f 4 a nd 1 2 ?
A)4B)48C)12D)2

27) _____

28) _____

29) _____

30) _____

31) _____

32) _____

33) _____

34) Find the greatest common factor of 42, 84, and 210.

34)

A) 7 B) 14 C) 42 D) 21

35) Which is the least common multiple of 2, 7, and 14?

35)

A) 14 B) 7

C) 196 D) none of the above

36) Which is the least common multiple of 12, 18, and 30? 36)
 A) 180 B) 6 C) 6,480 D) 1,620

37) Find the greatest common factor of 14, 21, and 35. 37)
 A) 2 B) 210 C) 7 D) 10,290

38) Find the greatest common factor of 26 and 52. 38)
 A) 676 B) 26 C) 13 D) 1

39) Which of the following list of fractions is equivalent to $\frac{7}{10}$? 39)

<p>A) $\frac{14}{20}, \frac{9}{35}, \frac{49}{70}$</p> <p>C) $\frac{14}{20}, \frac{28}{50}, \frac{35}{70}, \frac{49}{100}$</p>	<p>B) $\frac{7}{7}, \frac{7}{7}, \frac{7}{7}$</p> <p>D) $20^4, 0, 50, 70, 100$</p>
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40) Which of the following fractions is equivalent to $\frac{3}{4}$? 40)

<p>A) $\frac{15}{20}$</p>	<p>B) $\frac{15}{4}$</p> <p>C) $\frac{4}{2}$</p>
--------------------------------------	--

41) Find the equivalent fraction having the denominator indicated in $\frac{4}{5} = \frac{?}{?}$. 41)

<p>A) $\frac{12}{27}$</p> <p>B) $\frac{8}{27}$</p>	<p>C) $\frac{43}{27}$</p> <p>D) $\frac{92}{27}$</p>
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42) Reduce to lowest terms. 42)

<p>$\frac{20}{20}$</p>	<p>B) $\frac{84}{20}$</p> <p>D) 1</p>
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43) If each inch of a 64-unit English ruler is divided into 64 units, what part of an inch would be measured by 3 of the units?

A) $\frac{3}{6}$ inch B) 3 inches C) $1\frac{1}{4}$

—

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

43)

44) Reduce $\frac{24}{36}$ to lowest terms.

44) _____

A) $\frac{424}{636}$ —

C) $\frac{122}{183}$ —

45) Simplify $\frac{48}{96}$.

45) _____

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

B) $\frac{1}{4}$

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

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

E) none of the above

46) Write $1\frac{1}{25}$ in fractional form.

46) _____

A) $2\frac{325}{11}$ B) $\frac{2}{11}$

D) _____

$\frac{311}{25}$

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

47) Use a U.S. customary ruler to measure the line below to the nearest eighth of an inch: 47)



48) Use a U.S. customary ruler to measure the line below to the nearest fourth of an inch: 48)



49) Use a U.S. customary ruler to measure the line below to the nearest sixteenth of an inch: 49)



50) Use a U.S. customary ruler to measure the line below to the nearest half inch: 50)



51) Use a U.S. customary ruler to measure the line below to the nearest sixteenth of an inch:

51) _____



52) Use a U.S. customary ruler to measure the line below to the nearest fourth of an inch:

52) _____



53) Use a U.S. customary ruler to measure the line below to the nearest sixteenth of an inch:

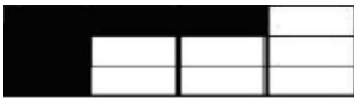
53) _____



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

54) Write a fraction to represent the shaded portion of a given figure.

54) _____



- A) $\frac{7}{9}$ B) $\frac{2}{9}$ C) $\frac{1}{9}$ D) $\frac{3}{9}$

55) Write a fraction to represent 4 out of 5 kittens in a litter.

55) _____

- A) $\frac{3}{5}$ B) $\frac{4}{5}$ C) $\frac{14}{55}$ D) $\frac{5}{55}$

56) Reduce $\frac{50}{100}$ to lowest terms.

56) _____

- A) $\frac{1}{2}$ B) $\frac{1}{10}$ C) $\frac{5}{10}$ D) $\frac{1}{20}$

57) Reduce $\frac{75}{100}$ to lowest terms.

57) _____

75

A)B)
2525

—

^{c)D)} 324
2550

—

58) Reduce $\frac{72}{180}$ to lowest terms.

58) _____

A) $\frac{72}{180}$
~~B) $\frac{72}{180}$~~

C) $\frac{362}{905}$
~~D) $\frac{362}{905}$~~

59) Which fraction is equivalent to $\frac{7}{8}$ and has a denominator of 56?

59) _____

A) $\frac{5635}{6456}$
~~B) $\frac{5635}{6456}$~~

C) $\frac{4915}{5656}$
~~D) $\frac{4915}{5656}$~~

60) Which fraction is equivalent to $\frac{3}{5}$ and has a denominator of 30?

60) _____

A) $\frac{189}{3030}$
~~B) $\frac{189}{3030}$~~

C) $\frac{303}{5030}$
~~D) $\frac{303}{5030}$~~

61) Which fraction is equivalent to $\frac{4}{7}$ and has a denominator of 28?

61) _____

A) $\frac{316}{2828}$
~~B) $\frac{316}{2828}$~~

C) $\frac{288}{4928}$
~~D) $\frac{288}{4928}$~~

62) If each inch on a U.S. customary rule is divided into 32 parts, what part of an inch would be indicated by the 5th hash mark in a inch? (Illustrate with a drawing.)

62) _____

A) $\frac{5}{64}$ inch B) $\frac{5}{16}$ inch C) $\frac{5}{16}$ inch D) $\frac{1}{16}$ inch

63) If one inch on a U.S. customary rule is divided into 16 parts, what is the length of each part of the inch?

63) _____

A) $\frac{1}{17}$ inch B) 16 inches C) $\frac{1}{16}$ inch D) $\frac{1}{16}$ inch

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

64) Describe how you can tell if a fraction has been reduced to lowest terms.

65) What is the process used to reduce a fraction?

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

66) Write $\frac{37}{14}$ as a mixed number. 66) _____

A) $2\frac{9}{14}$

B) $2\frac{1}{7}$

C) $12\frac{3}{14}$

D) $9\frac{2}{14}$

E) none of the above

67) Which of $2, 4, \frac{5}{12}, \frac{211}{34}$, is an improper fraction? 67) _____

A) $\frac{11}{4}$

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

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

90

68) Write $-\frac{4}{7}$ as a mixed number. 68) _____

A) $2\frac{4}{7}$

B) $3\frac{2}{7}$

C) $4\frac{2}{7}$

D) $7\frac{2}{7}$

E) none of the above

69) Convert $\frac{69}{16}$ to a mixed or whole number. 69) _____

16

A) $\frac{55}{416}$ B) $\frac{575}{48}$ C) $\frac{416}{16}$ D) $\frac{42}{16}$

70) Write $\frac{42}{16}$ as a whole or mixed number. 70) _____

$\frac{2772}{75}$
A) $\frac{75}{75}$ B) $\frac{75}{85}$ C) $\frac{85}{75}$ D) $\frac{85}{85}$

—

—

—

13

71) Write $\frac{6616}{113}$ as a whole or mixed

71) _____

A) $11\frac{3}{7}$ B) $17\frac{2}{7}$ C) $27\frac{1}{7}$ D) $27\frac{4}{7}$

72) A denominator of a fraction is 36 and the numerator is 15. Which of the following best describes the fraction?

72) _____

A) The fraction is best described as an improper fraction.

B) The item represented by the fraction is divided into 36 equal parts.

C) When written as a fraction the fraction is in lowest terms.

D) The fraction can be written as $\frac{36}{1}$.

73) Write $\frac{15}{3}$ as a whole or mixed number in lowest terms.

73) _____

A) $5\frac{4}{3}$ B) $4\frac{3}{3}$ C) 12 D) $1\frac{1}{5}$

74) Write $\frac{54}{12}$ as a whole or mixed number in lowest terms.

74) _____

A) $4\frac{2}{3}$ B) $5\frac{2}{3}$ C) $4\frac{2}{4}$ D) $4\frac{1}{2}$

75) Write $\frac{35}{10}$ as a whole or mixed number in lowest terms.

75) _____

A) $3\frac{2}{5}$ B) $2\frac{5}{10}$ C) $3\frac{1}{10}$ D) $3\frac{2}{20}$

76) Change $5\frac{2}{3}$ to an improper fraction.

76) _____

A) $\frac{10}{2}$ B) $\frac{10}{3}$ C) $\frac{17}{3}$ D) $\frac{17}{2}$

1517
C)D)

33
—

77) Convert $3\frac{7}{8}$ to an improper fraction.

77)

2131
A) $\frac{2131}{8}$ —

2924
C)D) $\frac{2924}{88}$ —

78) Change $2\frac{5}{6}$ to an improper fraction. 78)

$\frac{1713}{8}$	—	C) $\frac{1211}{66}$	—
A) $\frac{1713}{8}$		D) $\frac{1211}{66}$	

79) Change $2\frac{1}{8}$ to an improper fraction. 79)

$\frac{3185}{3}$	—	C) $\frac{3285}{328}$	—
A) $\frac{3185}{3}$		D) $\frac{3285}{328}$	

80) Change $1\frac{3}{4}$ to an improper fraction. 80)

$\frac{4959}{4}$	—	C) $\frac{2146}{44}$	—
A) $\frac{4959}{4}$		D) $\frac{2146}{44}$	

81) Change $7\frac{1}{3}$ to an improper fraction. 81)

$\frac{131122}{37}$	—	—	—
A) $\frac{131122}{37}$		B) $\frac{131122}{22}$	
		C) $\frac{131122}{3}$	
		D) $\frac{131122}{3}$	

82) Change 0.6 to its fraction or mixed-number equivalent and reduce to lowest terms. 82) _____

A) $\frac{4}{5}$	—	C) $\frac{6063}{100105}$	—
B) $\frac{4}{5}$		D) $\frac{6063}{100105}$	

83) Change 2.5 to its fractional equivalent and reduce to lowest terms. 83) _____

A) $\frac{25}{100}$	B) $2\frac{5}{10}$	C) $2\frac{1}{2}$	—
	D) $\frac{5}{10}$	E) $\frac{1}{2}$	

84) The length of a screw is 2.625 in. Represent this length as a mixed number. 84) _____

A) $2\frac{5}{8}$ in.	—	—	—
B) $2\frac{8}{10}$ in.		C) $2\frac{8}{10}$ in.	
		D) $2\frac{8}{10}$ in.	

85) Change $\frac{9}{10}$ to a decimal.
A) 9 B) 0.09 C) 0.9 D) 90

85) _____

86) Change $\frac{7}{9}$ to a repeating decimal.

86) _____

- A) $0.7\overline{7}$ B) 0.777777777 C) 0.77777778 D) 0.7

87) Change 0.024 to its fraction equivalent and reduce to lowest terms.

87) _____

- A) $\frac{24}{10025}$ B) $\frac{24}{1000}$ C) $\frac{24}{1000}$ D) $\frac{3}{125}$

88) The length of a screw is 4.275 in. Represent this length as a mixed number.

88) _____

- A) $4\frac{35117}{34}$ B) $4\frac{35117}{38}$ C) $4\frac{35117}{440}$ D) $4\frac{35117}{38}$

89) Which fraction represents a measure of 3475 ft.?

89) _____

- A) $\frac{3}{16}$ B) $\frac{347}{5}$ C) $\frac{13927}{40080}$ D) $\frac{347}{100}$

90) Change $\frac{7}{8}$ to a decimal.

90) _____

- A) 0.1875 B) 9.75 C) 1.875 D) 0.975

91) Write $\frac{7}{8}$ as a decimal to the hundredths place with remainder expressed as a

91) _____

fraction.

- A) $5\frac{81}{100}$ B) $5\frac{1}{8}$ C) $58\frac{1}{3}$ D) $5\frac{1}{25}$

92) A plane ends a gap of $\frac{5}{12}$ in. What should the gap be in decimal notation?

A) 0.63 in. B) 0.625 in. C) 1.6 in. D) 0.125 in.

92) _____

93) Which fraction is smallest?

93) _____

A) $\frac{53}{124}$

—

C) $\frac{216}{327}$

—

—

94) A quality control inspector used calipers to measure the diameters of four rods and found them to be 0.256 mm, 0.264 mm, 0.253 mm, and 0.249 mm. Which measure is largest?

94) _____

- A) 0.253 mm B) 0.264 mm C) 0.256 mm D) 0.249 mm

95) Which is the common denominator for $\frac{3}{a}$ and $\frac{5}{b}$? 95)

78

A)8B)15C)56D)7

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

96) Arrange the fractions in order beginning with the smallest: 96)
 $\frac{3}{4}, \frac{3}{5}, \frac{6}{7}$

48127

97) If hot dogs come in packages of ten and buns come in packages of five, what is the minimum number of packages of hot dogs and buns that need to be purchased so that there is an equal number of hot dogs and buns? 97)

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

98) Which is the common denominator for $\frac{3}{a}$ and $\frac{7}{b}$? 98)

515

A)5B)20C)15D)10

99) Arrange $\frac{4}{9}, \frac{1}{3}, \frac{5}{11}$ in order, beginning with the smallest. 99)
 9311

A) $\frac{1}{9}, \frac{5}{11}, \frac{4}{9}$

B) $\frac{1}{3}, \frac{4}{9}, \frac{5}{11}$

C) $\frac{5}{11}, \frac{4}{9}, \frac{1}{3}$

D) $\frac{4}{9}, \frac{1}{3}, \frac{5}{11}$

3 11 $\bar{9}$

3 9 1 1
 \bar{Z}

11 93

9 3 1 1

100) Which fraction is larger, $\frac{7}{9}$ or $\frac{7}{8}$? 100)

89

A) $\frac{7}{9}$
 B) $\frac{7}{8}$

—

101) Which fraction is larger, $\frac{2}{5}$ or $\frac{1}{3}$?

101
)

A) $\frac{35}{56}$ B) $\frac{5}{6}$

102) Which of the following expressions has the greatest value?

A) 0.87 B) $\frac{27}{100}$ C) $\frac{7}{10}$ D) $\frac{4}{5}$

103) Which is the common denominator for $\frac{1}{2}$, $\frac{5}{8}$, and $\frac{7}{10}$?

A) 100 B) 2 C) 72 D) 36

2188

102
)

103
)

104) Which is the common denominator for $\frac{7}{5}$, $\frac{5}{7}$, and $\frac{5}{5}$? _____

8126

A) 36 B) 12 C) 16 D) 24 _____

105) Which pair of fractions has the common denominator 48? _____

A) $\frac{3}{14}$ and $\frac{5}{12}$ B) $\frac{7}{36}$ and $\frac{5}{6}$ C) $\frac{5}{85}$ and $\frac{1}{5}$ D) $\frac{1}{616}$ and $\frac{7}{616}$ _____

106) A wrench is marked $\frac{11}{16}$ at one end and $\frac{15}{16}$ at the other end. Which end is larger? _____

1632

A) $\frac{1511}{3216}$ _____

107) Which decimal is larger, 4.35 or 4.336? _____

A) 4.35 B) 4.336

108) A nurse measures and records temperatures of 96.9, 98.5, 95.7, and 97.9. Which temperature is the highest? _____

A) 98.5 B) 95.7 C) 97.9 D) 96.9

ESSAY. Write your answer in the space provided or on a separate sheet of paper. _____

109) Which board is longer? One that is seven feet and four fifths inches or one that is seven feet and seven eighths inches? Explain how you know.

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

110) Add: $3 + \frac{14}{25}$ _____

A) $4\frac{7}{25}$

B)3⁵8

1

C) 32

D) $41\frac{3}{0}$

E) none of the above

111) What length of bolt is needed to fasten two pieces of metal each 111) _____

4

$\frac{3}{8}$ in. lock washer is used and a $\frac{1}{4}$ in. nut is used?

168

- 1311113
- A) $\frac{1}{16}$ in. B) $\frac{1}{8}$ in. C) $\frac{1}{4}$ in. D) $\frac{1}{2}$ in.

112) The studs of an outside wall are $5\frac{1}{2}$ in. thick. The inside wall board is $\frac{5}{8}$ in. thick 112) _____

28

and the outside covering is $\frac{1}{16}$ in. thick. What is the total thickness of the wall?

31151

- A) $9\frac{1}{16}$ in. B) $9\frac{1}{8}$ in. C) $8\frac{1}{16}$ in. D) $8\frac{1}{8}$ in.

113) Perform the indicated operation, leaving the answer in lowest terms: $\frac{1}{2} + \frac{2}{3} =$ _____

- A) $\frac{317}{1021}$ — C) $\frac{122}{2121}$ —
- 73

114) Add: $5\frac{7}{9} + \frac{7}{9}$ 114) _____

- 930
- A) $\frac{17}{45}$
- B) $\frac{12}{39}$
- C) $\frac{71}{90}$
- D) $\frac{23}{45}$
- E) none of the above

115) Perform the indicated operation, leaving the answer in lowest terms: $2 + 1 =$ 115) _____

- 31
- 711193 — 45

A)₂₂₄ \overline{B})₁₂₀C)₃₂₀D)₃₁₀

—

—

116) Add: $2\frac{1}{14} + \frac{9}{35}$

116) _____

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

B) $4\frac{9}{20}$

C) $3\frac{3}{70}$

D) $2\frac{7}{7}$

E) none of the above

117) Add $\frac{7}{8} + \frac{5}{8}$ and reduce answers to lowest terms with improper fractions changed

117) _____

88

to whole or mixed numbers.

A) $\frac{31}{8}$

C) $1\frac{33}{4}$

118) Add $\frac{7}{8} + \frac{3}{4}$ and reduce answers to lowest terms with improper

118) _____

fractions

164

changed to whole or mixed numbers.

A) $\frac{115}{2}$

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

119) Add $2\frac{7}{8} + 1$ and reduce answers to lowest terms with improper fractions

119) _____

84

changed to whole or mixed numbers.

A) $\frac{1121}{8}$

120) Joe added the following quarts
of oil: 1

$\frac{1}{8} + \frac{1}{4} + \frac{1}{3} + \frac{1}{8}$
did Joe add?

1 qt. 2 qt. and 3 qt. How much oil

2 4 2

120)

1 3

A) $\overline{72}$ qt. B) 74qt. C) 7qt. \overline{D}) 74qt.

—

121) Add $6\frac{5}{8} + 3$ and reduce answer to lowest terms with improper fractions 121)

85

change to whole or mixed numbers.

- A) $12\frac{13}{8}$ B) $12\frac{40}{8}$ C) $13\frac{40}{8}$ D) $13\frac{13}{8}$

122) A plumber uses a $\frac{3}{4}$ inch diameter copper tube wrapped with $\frac{11}{16}$ inch insulation. 122) _____

432

What size hole must be bored for the insulated pipe to pass through?

A) $13\frac{3}{2}$

B) $11\frac{5}{6}$

C) $11\frac{7}{6}$

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

E) none of the above

123) Perform the indicated operation, leaving the answer in lowest terms: $\frac{5}{8} + \frac{11}{16} =$ 123) _____

- A) $1\frac{45}{5}$ B) $1\frac{16}{3}$ C) $\frac{128}{3}$ D) $\frac{816}{55}$

124) Perform the indicated operation, leaving the answer in lowest terms: $7 + 4\frac{5}{8} + 4$ 124)

- = $\frac{14112}{27}$ B) $\frac{8}{5}$ C) $\frac{9}{18}$ D) $\frac{2}{3}$ 96

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

125) A plumber uses a $\frac{3}{4}$ inch pipe with $\frac{9}{16}$ inch insulation. What size hole 125) _____

832

must be bored for the insulated pipe to pass through?

126) _____

126) Find the mistake in the following problem: $\frac{3}{5} + \frac{5}{8} = \frac{8}{8}$
 $= \underline{4}$

46105

MULTIPLE CHOICE. Choose the one alternative that best completes the statement to answer the question.

127) Add $\frac{11}{7} + \frac{7}{7}$ and reduce answer to lowest terms with improper fractions 127) _____

128

changed to whole or mixed numbers.

$\frac{991919}{110}$ A) $\frac{901919}{110}$ B) $\frac{991919}{10}$ C) $\frac{991919}{24}$ D) $\frac{991919}{124}$ _____

128) Add $10 + 4\frac{4}{5}$ and reduce answer to lowest terms with improper fractions 128) _____

5

changed to whole or mixed numbers.

$\frac{4144}{185}$ A) $\frac{4144}{185}$ B) $\frac{4144}{55}$ C) $\frac{4144}{65}$ D) $\frac{4144}{145}$ _____

129) A blue print calls for a piece of bar stock $7\frac{5}{8}$ in. long. If a tolerance of ± 1 in. is 129) _____

816

allowed, what is the longest permissible measurement for the bar stock? 91311

A) $\frac{716}{74}$ B) $\frac{716}{74}$ C) $\frac{716}{78}$ D) $\frac{716}{716}$ _____

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

130) Why is a least common denominator so important in adding fractions?

MULTIPLE CHOICE. Choose the one alternative that best completes the statement to answer the question.

131) Subtract: $\frac{5}{7} - \frac{1}{7}$ 131) _____

1230

A) $\frac{7}{30}$

B) $\frac{7}{60}$

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

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

60

E) none of the above

132) The diameter of a hole is $1\frac{5}{8}$ inches. The screw it is used to fit is $1\frac{1}{4}$ inches. By how much is the hole longer or shorter than the screw?

- A) $\frac{1}{4}$ in. B) $\frac{1}{8}$ in. C) $\frac{1}{2}$ in. D) 1 in.

3

133) A fence board is 96 inches long. A 24-inch section is cut off. The saw blade takes an additional $\frac{1}{4}$ inch. How long is the finished board?

- A) $93\frac{1}{4}$ inches B) $93\frac{3}{4}$ inches C) $94\frac{1}{4}$ inches D) $94\frac{3}{4}$ inches

134) Subtract: $9\frac{3}{8} - 3\frac{7}{8}$

A) $5\frac{2}{4}$

B) $5\frac{1}{2}$

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

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

E) none of the above

$1\frac{1}{2} - \frac{5}{8} =$

135) Perform the indicated operation, leaving the answer in lowest terms.

66

- A) $4\frac{1}{4}$ B) $4\frac{3}{4}$ C) $3\frac{1}{4}$ D) $3\frac{3}{4}$

136) Perform the indicated operation, leaving the answer in lowest terms.

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

134) _____

135)

136) _____

A)B)
410

—

C)11D)-1
214

—

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

137) Six rods $\frac{1}{3}$ inches long were cut from a piece of iron rod 41 inches long. 137) _____

16

Allow $\frac{1}{8}$ inch waste for each cut. What was the length of the piece left?

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

138) Subtract: $\frac{5}{2} - \frac{12}{8}$. 138) _____

A) $3\frac{7}{6}$

B) $3\frac{1}{6}$

C) $\frac{13}{24}$

D) $1\frac{7}{8}$

E) none of the above

139) Mary cut $4\frac{3}{4}$ sq. yd. of cloth from $5\frac{1}{2}$ sq. yd. of cloth. How many sq. yd. of cloth 139)

remain?

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

B) $\frac{11}{42}$

—

D) $1\frac{1}{4}$

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

140) How long of a bolt is needed to fasten two pieces of metal each $1\frac{1}{2}$ inches 140) _____

16

thick if a $\frac{7}{8}$ -inch thick nut is used? The nut must be flush with the bolt

64

after tightening.

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

141) Subtract and reduce when necessary: $\frac{5}{3}$
- $\frac{3}{3}$

141) _____

A) $\frac{12}{20}$
B) _____

—

1616

$$\frac{11}{816}$$

—

142) Subtract and reduce when necessary: 1

142) _____

$\frac{1}{5}$

$$\begin{array}{r} \text{A) } \frac{33}{84} \\ \hline \end{array} \quad \begin{array}{r} 168 \\ 11 \\ \hline \text{C) } \frac{11}{816} \\ \hline \end{array}$$

143) Subtract and reduce when necessary: 6

143) _____

$\frac{7}{5}$

$$\begin{array}{r} 711 \\ \hline \text{A) } \frac{18}{18} \text{ B) } \frac{18}{18} \text{ C) } \frac{1}{48} \\ \hline \end{array} \quad \begin{array}{r} 8 \\ \hline \end{array}$$

144) Subtract and reduce when necessary: 3⁵

144) _____

$\frac{7}{1}$

$$\begin{array}{r} 2122 \\ \hline \text{A) } \frac{29}{29} \text{ B) } \frac{29}{29} \text{ C) } \frac{39}{20} \text{ D) } \frac{20}{20} \\ \hline \end{array} \quad \begin{array}{r} 99 \\ \hline \end{array}$$

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

145) A machine part is fabricated

$\frac{5}{8}$ inch long with a tolerance of \pm

145) _____

1

32 inch. What is the smallest and largest the part can be?

146) A machine part is fabricated

$\frac{1}{8}$ inch long with a tolerance of \pm

146) _____

4

1

32 inch. What is the smallest and largest the part can be?

147) Find the mistake in the following problem:

147) _____

$$\begin{array}{r} 12341 \\ 2-1=2-1=1 \\ 23666 \end{array}$$

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

3

148) Perform the indicated operation in the expression $\frac{1}{n^2 4^{-15}}$ =

148)

A) $\frac{117}{20}$ B) $\frac{224}{3}$ C) $\frac{10}{3}$ D) $\frac{3}{20}$

$\frac{319}{\quad}$ $\frac{\quad}{\quad}$

149) Sub t ra ct a nd re duce w he n ne ce ssa ry:

149) _____

9 - 2

$\begin{array}{r} \text{A)B) } \overline{1} 7 \\ 129 \end{array}$	-	$\begin{array}{r} 123 \\ 117 \\ \text{C)D) } \overline{1512} \end{array}$	-
---	---	---	---

150) Sub t ra ct a nd re duce w he n ne ce ssa ry: 7 12 8

150) _____

$\text{A)B) } \overline{11} \\ 62$	-	$\text{C)D) } \overline{11} \\ 812$	-
------------------------------------	---	-------------------------------------	---

151) Sub t ra ct a nd re duce w he n ne ce ssa ry: 2 3 5 8⁷

151) _____

$\begin{array}{r} 5 \\ \text{A)B) } \overline{1} \text{C)D) } \\ 241224 \end{array}$	-	$\begin{array}{r} 5 \\ 1 \\ \overline{1} \end{array}$	-
--	---	---	---

152) Sub t ra ct a nd re duce w he n ne ce ssa ry: 1 2 1 9 - 3

152) _____

$\begin{array}{r} 13-3 \\ \overline{81} \end{array}$	-	$\begin{array}{r} 3232 \\ 133 \\ \overline{916} \end{array}$	-
--	---	--	---

20

$\begin{array}{r} 7 \\ \overline{15} \end{array}$	-	$\begin{array}{r} 816 \\ \overline{1115} \end{array}$	-
---	---	---	---

153) _____

$\begin{array}{r} \text{A) } \overline{11} \text{ B) } \overline{10} \text{ C) } \overline{11} \text{ D) } \overline{10} \\ 16 \end{array}$	-	$\begin{array}{r} 1 \\ \overline{10} \end{array}$	-
---	---	---	---

154) A co ncre t e fo unda tio n includ e s 1 0 3 inche s fill. I f t he fo unda tio n is t o b e 3 2

154) _____

inche s t hick, ho w t hick must t he co ncre t e la ye r b e ?

A) $2\bar{1}3$ in. B) 223 in. C) $2\bar{2}3$ in. D) 213 in.

—

—

155) Multiply: $\frac{5}{3} \times \frac{3}{4} \times$

155) _____

9104

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

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

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

D) $\frac{11}{12}$

E) none of the above

156) Perform the indicated operation, leaving the answer in lowest terms: $2 \times 1 =$

$3\frac{1}{4}$ 156)

45

319

711

A) $3\frac{10}{20}$ B) $3\frac{20}{24}$ D) $1\frac{20}{20}$

157) If you multiply a proper fraction by a proper fraction, the result is a number that is

157) _____

A) equal in size to the largest factor.

B) smaller than the largest factor only.

C) larger than either of the factors.

D) smaller than either of the factors.

158) Multiply: $\frac{8}{3} \times \frac{3}{4} \times \frac{3}{5}$

158) _____

9410

A) $\frac{10}{27}$

$\frac{3}{8}$

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

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

D) $\frac{1}{5}$

E) none of the above

159) Perform the indicated operation, leaving the answer in lowest terms:

159) _____

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

A) $\frac{1714}{2123}$

—

C) $\frac{211}{2121}$

—

$\frac{37}{52}$

160) Perform the indicated operation, leaving the answer in lowest terms: $2 \times 4 =$

160) _____

A) $\frac{11082}{3}$ B) $\frac{11082}{21}$ C) $\frac{11082}{21}$ D) $\frac{11082}{3}$

—

$\frac{73}{1 \frac{4}{7}}$

161) Perform the indicated operation, leaving the answer in lowest terms: $3 \times =$

161) _____

A) $\frac{11}{9}$ B) $\frac{11}{3}$ C) $\frac{11}{27}$

—

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

D) $2 \frac{20}{21}$

$\frac{1 \frac{4}{7}}{129}$

$\frac{129}{5}$

162) Perform the indicated operation, leaving the answer in lowest terms: $7 \times \frac{5}{6} =$

162) _____

A) $\frac{5}{2}$ B) $\frac{5}{6}$

C) $\frac{4}{2}$

D) $\frac{70}{12}$

163) Multiply: $1 \frac{2}{3} \times 1 \frac{1}{5}$

163) _____

$\frac{35}{1}$

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

B) $4 \frac{1}{2}$

C) $3 \frac{1}{1} \frac{4}{5}$

D) 5 3

E) none of the above

164) Multiply and reduce a

answers to lowest terms. $\frac{1}{x-7}$

A) $\frac{77}{48}$

-

c) $\frac{416}{6416}$

-

164)

165) Multiply and reduce answers to lowest terms:

165) _____

7 ~~5~~

$$\frac{105}{A) 32}$$

$$B) \frac{10}{5} = \frac{25}{6}$$

$$C) \frac{832}{10511} = \frac{416}{5255.5}$$

166) Multiply, reduce answers to lowest terms and convert improper fractions to

166) _____

whole or mixed numbers: $9 \frac{4}{5} \times 3 \frac{4}{5}$

$$A) \frac{413636}{27} = \frac{413636}{5}$$

$$B) \frac{34}{34} = 1$$

$$C) \frac{34}{34} = 1$$

$$D) \frac{27}{27} = 1$$

167) Multiply, reduce answers to lowest terms and convert improper fractions to

167) _____

whole or mixed numbers: $5 \frac{3}{5} \times 3 \frac{5}{5}$

$$A) \frac{572929}{1516} = \frac{572929}{1516}$$

$$B) \frac{24}{24} = 1$$

$$C) \frac{2024}{2024} = 1$$

$$D) \frac{2048}{2048} = 1$$

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

168) Standard typing paper ¹/₂ is 8 inches wide by 11 inches long. If the margin

168) _____

2

all around the edge of the paper is a uniform one inch, what is the area of the paper that can be printed on? (Note: Area = Length \times Width)

169) A plumber needs 6 pieces of pipe $5 \frac{1}{2}$ feet

169) _____

each is 16 inches long. If inch waste is

88

allowed for each cut, what length pipe must the plumber have?

170) _____

170) A metal bar is cut into six pieces each $3 \frac{1}{3}$ inches long. Each cut wastes

816

inch. Determine the length of the original bar.

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

5
—

171) The staircase in a house has 15 risers, each one $\frac{7}{8}$ inches high. What is the total

rise of the steps?

$\frac{35}{3}$

- A) $11\frac{9}{8}$ inches B) 1058 inches C) 108 inches D) $114\frac{8}{8}$ inches —

172) Multiple and reduce answers to lowest terms $\left| \begin{array}{r} 3 \\ 1 \end{array} \right|$ 172) _____
 rms: 8 4

A) $\frac{33}{168}$

—

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

$\frac{21}{112}$

173) A fuel tank that holds 90 liters (L) of fuel is $\frac{2}{3}$ full. How many liters of fuel are in the tank? _____

the tank?

A) 60L B) 135L

C) 90L D) none of the above

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

174) A alloy weighing 42 pounds is $\frac{2}{5}$ copper, $\frac{1}{5}$ silver, and $\frac{2}{5}$ other material. How many pounds of silver are in the alloy? Explain the process you used to find the answer.

555

175) A mixture of dirt, sand, etc. that weighs 350 pounds is 3 parts dirt, 1 part sand, 2 parts top soil, and 2 parts peat. How many pounds of dirt are in the mixture? Explain the process you used to find the answer.

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

176) Raise to the indicated power: $\left(\frac{2}{3} \right)^2$ 176)

=====

177) Raise to the indicated power: $\left(\frac{3}{8} \right)^2$ 177)

=====

178) Raise to the indicated power: $\left(\frac{1}{4} \right)^3$ 178)

179) Raise to the indicated power: $\left(\frac{2}{3} \right)^3$ 179)

5

180) Raise to the indicated power: 12^{-180}

181) Raise to the indicated power $\left(25\right)^{181}$

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

182) Raise to the indicated power $\left(w\right)^9$ 182) _____
 r: 4^2

- A) ~~B) C) D)~~
 88216
 918381

183) Perform the indicated operation, leaving the answer in lowest terms: $\left(\frac{32}{-4}\right) =$ 183) _____
 5

- A) ~~B) C) D)~~
 9639
 252555

184) Perform the indicated operation, leaving the answer in lowest terms: $\left(\frac{52}{7}\right) =$ 184) _____

- A) ~~B) C) D)~~
 525
 714

- C) ~~D)~~
 2510
 4949

185) Raise to the indicated power $\left(w\right)^5$ 185) _____
 3^2
 r: -

- A) ~~B) C) D)~~
 96
 1010

- C) ~~D)~~
 69
 2525

186) Raise to the indicated power $\left(w\right)^3$ 186) _____
 r: -23

- A) ~~B) C) D)~~
 66
 279

- C) ~~D)~~
 82
 273

187) Raise to the indicated power $\left(w\right)^5$ 187) _____
 23
 r: -

$$\text{A) } \frac{6}{125}$$

B) C) D)

$$\frac{896}{1251515}$$

—

188) Raise to the indicated power:

188)

12

$$\text{A) } 1 \frac{1111}{2} \quad \text{B) } 2 \quad \text{C) } 2 \quad \text{D) } 1 \frac{—}{4}$$

—

—

189) Divide: $\frac{81}{0}$

- 76
- A) $\frac{15}{24}$
5
- B) $\frac{12}{24}$
- C) $\frac{24}{35}$
- D) $\frac{5}{6}$

E) none of the above

190) Divide: $1\frac{31}{48} \div 2$

- A) $\frac{15}{13}$
- B) $\frac{17}{14}$
- C) $\frac{14}{17}$
- D) $\frac{13}{15}$

E) none of the above

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

191) Perform the indicated operation, leaving the answer in lowest terms: $2\frac{3}{4} - 2\frac{1}{3}$

A) $\frac{41633}{33416}$

$$\frac{2}{53}$$

192) Perform the indicated operation, leaving the answer in lowest terms: $\frac{1}{19} - \frac{1}{19}$

$$\frac{1}{19}$$

$$11025$$

A) \overline{B} B) \overline{C} C) \overline{D} D) \overline{A}

—

189) _____

190)

191)

192) _____

193) If you divide a larger fraction by a not the smaller fraction, the result is a number that is:

193 _____
)

- A) half way between the two fractions.
- B) larger than either of the fractions. C
-) smaller than either of the fractions. D
-) equal to only one of the fractions.

194) You have a board that is 42 inches wide and would like to position 6 smaller boards each 5 inches wide across the big board so that there is no "margin" on either side, but they are equally spaced across the board. How much space should be allowed between each of the small boards?

194 _____
)

- 2
- A) 2 5 inches B) 2 inches C) 3 inches D) 7 inches

195) What is the reciprocal of 4.3?

195 _____
)

- A) $\frac{434}{310}$ _____
- B) $\frac{434}{310}$ _____
- C) $\frac{103}{434}$ _____
- D) $\frac{103}{434}$ _____

196) Perform the indicated operation, leaving the answer in lowest terms: $\frac{2}{3} \div \frac{1}{21} =$

196 _____
)

- A) $4\frac{211172}{3}$ _____
- B) $\frac{21}{21}$ _____
- C) $\frac{21}{21}$ _____
- D) $\frac{21}{21}$ _____

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

197) Perform the indicated operations and reduce:

$$\frac{4\frac{9}{16} - \frac{31}{8}}{13} = 197)$$

$$\frac{13}{2 + 1} = 416$$

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

198) Divide: $2 \overline{) 198}$ 198
 $\underline{3}$

105

A) $\frac{15}{17}$

B) $\frac{13}{15}$

C) $\frac{27}{34}$

D) $\frac{37}{50}$

E) none of the above

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

199) Perform the indicated operations and reduce: $54 - \frac{11}{32}$ =199)

$$\frac{11}{44 - 22}$$

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

200) Divide: $\frac{8}{93}$ 200
 $\underline{4}$

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

B) $\frac{2}{5}$

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

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

E) none of the above

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

7
11

201) Which description best describes $\frac{5}{12}$?

- A) Mixed-decimal fraction
- B) Proper fraction
- C) Decimal fraction
- D) Complex fraction

202) Give the reciprocal of $\frac{7}{7}$. 202) _____

A) 1 B) - C)

99

D) $\frac{9}{7}$

203) Give the reciprocal of 9. 203) _____

A) $\frac{1}{9}$ B) $\frac{1}{9}$

C) 1 D) -9

204) Divide and reduce answer to lowest terms, converting improper fractions to whole or mixed numbers: 204) _____

$$6 \frac{1}{7} \div 1 \frac{1}{7}$$

A) $\frac{2}{20}$ B) 1 C) $\frac{4}{9}$ D) $\frac{1}{9}$

205

205) Divide and reduce answer to lowest terms converting improper fractions to whole or mixed numbers: 205) _____

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

A) $\frac{1}{20}$ B) $\frac{1}{20}$ C) $\frac{4}{5}$ D) $\frac{5}{9}$

206) Divide and reduce answer to lowest terms. Convert improper fractions to whole or mixed numbers: 206) _____

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

A) 4 B) 9 C) $\frac{1}{9}$ D) $\frac{1}{9}$

94

207) Divide and reduce answer to lowest terms. Convert improper fractions to whole or mixed numbers: 207) _____

$$4 \div \frac{5}{6}$$

A) $\frac{14}{3}$ B) $\frac{4}{5}$ C) $\frac{5}{24}$ D) $\frac{5}{24}$

208) Divide and reduce answer to lowest terms. Convert improper fraction to whole or mixed number:

208) _____

$$\frac{3}{8} - \frac{5}{7}$$

A) $\frac{102}{495}$

—

C) $\frac{921}{1040}$ D) _____

209) Divide and reduce answer to lowest terms. Convert improper fraction to whole or mixed number:

209) _____

$$\frac{3}{8} - \frac{6}{6}$$

A) $\frac{1}{164}$

D) $\frac{1}{164}$

—

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

210) Five boards $3\frac{3}{4}$ inches long are cut from a piece of board that is 41 inches

210) _____

long. Allow $\frac{1}{4}$ inch waste for each cut. What was the length of the piece

8

left?

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

211) Each shelf in a floor-to-ceiling bookshelf needs a strip of molding $32\frac{3}{4}$ inches

212)

16

An I-

cut from a length of molding measuring $225\frac{5}{8}$ inches long. If the length of the

16

shelf includes the saw cut, how many shelves are in this bookshelf?

6C)7D)8

b e a

m m e

a s u r e

s 1 4 f

t l o n g

. How many whole 2^1

— ft pieces can be cut from
16

211)

this length?

A)8 B)6 C)7 D)5

212)

213) Give the reciprocal of

213)

$$\begin{array}{r} 55. \\ \hline -528 \\ \hline \end{array}$$

A) $\frac{1}{285}$ B) $\frac{1}{285}$ C) $\frac{35}{55}$ D) $\frac{28}{55}$

214) Give the reciprocal of

214) _____

$$\begin{array}{r} 1 \\ \hline 8. \\ \hline -1 \\ \hline \end{array}$$

A) $\frac{1}{8}$ B) $\frac{1}{8}$ C) $\frac{8}{1}$ D) $\frac{8}{1}$

215) Give the reciprocal of

215)

$$\begin{array}{r} 4 \\ \hline 5 \\ \hline \end{array}$$

A) $\frac{4}{5}$ B) $\frac{5}{4}$ C) $\frac{5}{2323}$ D) $\frac{4}{2323}$

216) Divide and reduce answer to lowest terms, converting improper fractions to

216) _____

whole or mixed number: $\frac{1}{6} \div \frac{1}{2}$

$$\begin{array}{r} 1 \\ \hline 123 \\ \hline \end{array}$$

A) $\frac{1}{123}$ B) $\frac{1}{123}$ C) $\frac{12}{3}$ D) $\frac{3}{12}$

217) Three-fourths of a mile is divided into 3 mile segments. How many segments are

217) _____

8

in the $\frac{3}{4}$ mile?

A) 2 segments B) 6 segments

51

C) $\frac{3}{9}$ segments D) 2 segments

218) How many $\frac{1}{4}$ foot lengths can be cut from a board 18 feet long?

218)

4

219) How many pieces of fabric that are each 13 yards can be cut from a bolt that has

219)

10 yards of fabric?

- A) 4 pieces B) $1\frac{2}{3}$ pieces C) 6 pieces D) 5 pieces

220) A stack of books measures 22 inches high and each book is $\frac{1}{2}$ inch thick. How

220)

28

many books are in the stack?

- A) 36 books B) 14 books C) 13 books D) 22 books

221) Use a calculator to round and reduce answers to lowest terms, converting

221) _____

improper fractions to whole or mixed numbers:

$$\begin{array}{r} \underline{1} \\ 122 \\ \hline 100 \end{array}$$

A) $\frac{13}{825}$ —

C) $\frac{31}{402}$ —

222) Use a calculator to perform the calculations:

222) _____

$$\begin{array}{r} 3 \underline{1} \\ 3+1 \\ 42 \\ \hline \end{array}$$

$$5-\underline{4}5$$

A) $\frac{11}{184}$ B) $\frac{11}{14}$ —

$$\underline{4}$$

- C) 3 D) none of the above

223) Use a calculator to perform the calculations:

223) _____

$$\begin{array}{r} 5 \underline{3} \\ 3+1 \\ 84 \\ \hline 25 \\ \hline \end{array}$$

36

A 3
)

) 5

129

140

$$\begin{array}{r} \overline{}8 \\ C) 7 \\ 1 \\ 8 \\ 4 \end{array}$$

$$\begin{array}{r} 12 \\ D) \overline{9} \\ 14 \\ 8 \end{array}$$

—

224) Perform the indicated operation, leaving the answer in lowest terms: $\frac{4}{2} - \frac{2}{2} =$ 224) _____

A) $\frac{44}{2255}$ B) $\frac{4}{2}$

C) $\frac{216}{1545}$ D) $\frac{2}{2}$

225) Three books measuring

$\frac{1115}{1}$

and are placed into one stack and

shrink

2156

wrappe d. Use a calculator to find the total thickness of the package stack.

A) $1\frac{171}{23}$ B) $2\frac{15}{15}$ C) $3\frac{3}{15}$ D) $4\frac{30}{30}$

$\frac{113}{1}$

3
226) Use a calculator to add 6 + with

$\frac{17}{2}$

Write answer in lowest terms

226)

4312

improper fractions changed to whole or mixed numbers.

A) $8\frac{112}{19}$ B) $9\frac{3}{9}$ C) $9\frac{8}{9}$ D) $8\frac{8}{12}$

$\frac{211}{1}$

227) Use a calculator to multiply and reduce answer to lowest terms: $\left(\frac{7}{1}\right)\left(\frac{2}{9}\right)$ 227) _____
terms: 12

A) $\frac{7}{126}$ B) $\frac{96}{7}$

C) $\frac{4}{8}$

D) $\frac{126}{1,728}$

228) Use a calculator to multiply and reduce answer to lowest terms: $\left(\frac{9}{1}\right)\left(\frac{8}{2}\right)$ 228) _____
terms: 56 1

A) $1\frac{1}{84}$ B) $5\frac{7}{7}$

C) $\frac{216}{1,680}$ D) $\frac{9}{70}$

229) Use a calculator to multiply, reduce answer to lowest terms and convert

improper fractions to whole or mixed numbers: $\frac{2}{5} \cdot \frac{7}{8}$

$$\begin{array}{r}
 111741 \\
 \text{A) } 7 \overline{) 4} \quad \text{B) } 3 \overline{) 20} \quad \text{C) } 3 \overline{) 40} \quad \text{D) } 2 \overline{) 40}
 \end{array}$$

230) Use a calculator to multiply, reduce answer to lowest terms and convert

230) _____

improper fraction to whole or mixed number

rs: 5 4 7 3

1117
 A) $\frac{1117}{352}$ B) $\frac{1117}{4412}$ C) $\frac{1117}{362}$ D) $\frac{1117}{4312}$ —

$\frac{32}{\quad}$

231) Use a calculator to divide and reduce to lowest terms, converting

231) _____

improper fraction

to whole or mixed numbers: $7 \frac{5}{8}$

$$\begin{array}{r} 335 \\ \overline{)55} \end{array}$$

$$\begin{array}{r} 832 \\ \overline{)113} \end{array}$$

$$\begin{array}{r} 113 \\ \overline{)113} \end{array}$$

$$\begin{array}{r} 735 \\ \overline{)84} \end{array}$$

$$\begin{array}{r} \\ \overline{)113} \end{array}$$

—

232) Use a calculator to divide and reduce to lowest terms, converting

improper fraction to whole or mixed number: $\frac{6}{2}$

$$\begin{array}{r} 1 \\ \overline{)2} \end{array}$$

$$\begin{array}{r} 122 \\ \overline{)12} \end{array}$$

—

—

233) Use a calculator with a fraction key to perform the indicated operation

$$\left(\frac{51}{86} \right)$$

$$\begin{array}{r} 235235 \\ \overline{)9048} \end{array}$$

—

—

$$\begin{array}{r} 8424 \\ \overline{)9024} \end{array}$$

$$\begin{array}{r} 8448 \\ \overline{)8448} \end{array}$$

232) _____

233)

Answer Key

y

Test name : UNTITLED2

- 1) A
- 2) C
- 3) B
- 4) D
- 5) D
- 6) D
- 7) B
- 8) D
- 9) C
- 10)
B
- 11)
B
- 12)D
- 13)
A
- 14)
C
- 15)
C
- 16)
B
- 17)
C
- 18)
C
- 19)
B
- 20)
C
- 21)
C
- 22)
C
- 23)
B
- 24)
B
- 25)
A
- 26)
A

27)

C

28)

B

29)

B

30)

B

31)D

32)

B

33)

C

34)

C

35)

A

36)

A

37)

C

38)

B

39)D

40)

B

41)

A

42)

C

43)

A

44)D

45)

E

46)D

47) 2 in.

48) $14\frac{1}{2}$ in.

Answer Key

Test name: UNTITLED 2

$$49) 13\frac{5}{6} \text{ in.}$$

$$50) 1\frac{1}{2} \text{ in.}$$

$$51) 11\frac{3}{6} \text{ in.}$$

$$52) 3\frac{3}{4} \text{ in.}$$

$$53) 11\frac{7}{6} \text{ in.}$$

54) B

55) D

56) B

57) B

58) D

59) C

60) A

61) B

62) B

63) C

64) Answers will vary.

65) Answers will vary.

66) A

67) B

68) A

69) A

70) D

71) B

72) B

73) A

74) A

75) A

76) D

77) B

78) A

79) B

80) B

81) D

82)D

83)C

84)C

85)C

86)D

87)D

88)C

89)C

Answer Key

Test name : UNTITLED 2

90)C

91)B

92)B

93)A

94)B

95)C $\frac{536}{1247}$ —

96), $\frac{3}{8}$

97) 4 p kg s hot dog s, 5 p kg s b uns

98)

C

99)

B

100)

B

101)

B

102)

C

103)

C

104)

D

105)

D

106)

B

107)

A

108)

A

109) Answers will vary.

110)

D

111)

A

112)

B

113)

B

114)

C

115)

C

116)

C

117)

B

118)

D

119)

B

120)

B

121)

C

122)

C

123)

B

124)

C

125) $125 \frac{15}{16}$ in.

) 16

126) To add, you need a common denominator.

$$\frac{3}{4} + \frac{5}{6} = \frac{9}{12} + \frac{10}{12} = \frac{19}{12} \text{ or } 1 \frac{7}{12}$$

46

12121212

127)D

128)D

129)D

130) Answers will vary.

131)D

132)B

Answer Key

Test name: UNTITLED 2

133)B

134)B

135)D

136)C

137) $2\frac{7}{8}$

138)B

139)A

140) $3\frac{1}{4}$

141)C

142)D

143)A

144)A

145) $3\frac{19}{3232}$, Largest: 3

146) $8\frac{7}{3232}$, Largest: 8

147) Borrowing is required.

$12\frac{34945}{23}$ $165)B$

148)A

149)A

150)C

151)A

152)A

153)D

154)A

155)B

156)A

157)D

158)D

159)C

160)D

161)C

162)B

163)D

164)C

6666

$$168 \overline{) 58} \frac{1}{2} \text{ in.}$$

$$169 \overline{) 1080} \frac{3}{\text{in.}}$$

Answer Key

Test name: UNTITLED 2

170) $20\overline{)9}$ in.

16

171) D

172) A

173) A

174) Answer will vary.

175) Answer will vary.

176) $\frac{4}{-}$

177) $\frac{9}{64}$

178) $\frac{1}{64}$

179) $\frac{8}{12}$

180) $\frac{5}{7}$

181) $\frac{19}{21}$

182) 425

183) D

184) A

185) C

186) D

187) C

188) B

189) C

190) C

191) B

192) A

193) B

194) A

195) C

196) A

197) $\frac{23}{-}$

198)C

199)1

200)C

201)D

202)D

203)B

204)B

205)C

Answer Key

Test name : UNTITLED 2

206)B

207)B

208)D

209)A

210) 211) ⁵
in. left
8

211)C

212)B

213)D

214)D

215)D

216)B

217)A

218)B

219)C

220)A

221)A

222)B

223)B

224)D

225)C

226)B

227)B

228)D

229)B

230)B

231)A

232)C

233)A

