

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

Solve. Write the answer in simplest form.

1) Find $\frac{13}{14}$ of 84. 1) _____

- A) $\frac{13}{1176}$ B) 78 C) 84 D) $\frac{1176}{13}$

Perform the indicated operation. Write the answer in simplest form.

2) $2\frac{4}{5} \cdot 1\frac{3}{7}$ 2) _____

- A) 4 B) 2 C) 3 D) 0

Solve. Write the answer in simplest form.

3) A rectangular flower bed in front of a building measures $12\frac{1}{2}$ feet by $1\frac{1}{5}$ feet. What is the total area of the flower bed? 3) _____

- A) 15 square feet B) 14 square feet
C) 16 square feet D) $12\frac{1}{10}$ square feet

Write the fraction in simplest form.

4) $\frac{100}{175}$ 4) _____

- A) $\frac{25}{7}$ B) $\frac{4}{25}$ C) $\frac{4}{7}$ D) $\frac{100}{175}$

Find the prime factorization of the number. Write any repeated factors using exponents.

5) 5800 5) _____

- A) $2^2 \cdot 5^3 \cdot 29$ B) $2^3 \cdot 5^2 \cdot 29$ C) $5^4 \cdot 29$ D) $2^4 \cdot 29$

Draw and shade a part of a diagram to represent the figure.

6) $\frac{3}{8}$ of a diagram

6) _____

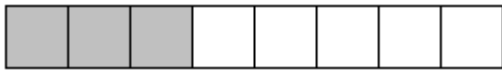
A)



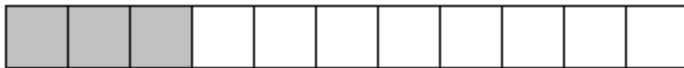
B)



C)



D)



Divide. Write the answer in simplest form.

7) $\frac{1}{11} \div \frac{5}{14}$

7) _____

A) $\frac{13}{55}$

B) $\frac{12}{55}$

C) $\frac{14}{55}$

D) $\frac{14}{53}$

Solve.

8) Toni needs to cut a $6\frac{2}{7}$ - foot board into 3 equal pieces. How long should each piece be?

8) _____

A) $18\frac{6}{7}$ ft

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

C) $6\frac{2}{21}$ ft

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

Identify the number as prime or composite.

9) 163

9) _____

A) Composite

B) Prime

Divide. Write the answer in simplest form.

10) $\frac{1}{7} \div \frac{16}{15}$

10) _____

A) $\frac{16}{23}$

B) $\frac{16}{105}$

C) $\frac{15}{112}$

D) $\frac{17}{22}$

Write the fraction in simplest form.

11) $\frac{186}{78}$

11) _____

A) 31

B) $\frac{31}{6}$

C) $\frac{6}{13}$

D) $\frac{31}{13}$

Fill in the blank with one of the words or phrases listed below.

mixed number
composite number
prime number
reciprocals

equivalent
improper fraction
proper fraction
cross products

0
simplest form
numerator

undefined
prime factorization
denominator

12) The _____ of a number is the factorization in which all the factors are prime numbers.

A) reciprocals

C) prime factorization

B) simplest form

D) 0

12) _____

Identify the number as prime or composite.

13) 189

A) Prime

B) Composite

13) _____

Divide. Write the answer in simplest form.

14) $\frac{2}{5} \div \frac{6}{7}$

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

B) $\frac{12}{35}$

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

D) $\frac{7}{15}$

14) _____

Perform the indicated operation. Write the answer in simplest form.

15) $\frac{5}{2} \cdot \frac{12}{3}$

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

B) $\frac{17}{5}$

C) 10

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

15) _____

Use the order of operations to simplify the expression.

16) $2^2 + \left(\frac{1}{3}\right)^2$

A) $\frac{35}{9}$

B) $\frac{37}{9}$

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

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

16) _____

Find the least common multiple (LCM) of the list of numbers.

17) 30, 20, 50

A) 100

B) 60

C) 150

D) 300

17) _____

Subtract and simplify.

18)

$12\frac{2}{9}$

$- 6\frac{5}{6}$

A) 5

B) $6\frac{7}{18}$

C) $4\frac{5}{18}$

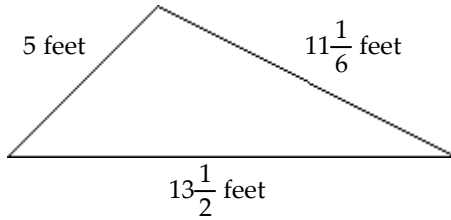
D) $5\frac{7}{18}$

18) _____

Solve.

19) Find the perimeter of the triangle.

19) _____



A) $29\frac{2}{3}$ feet

B) $29\frac{1}{6}$ feet

C) $43\frac{5}{8}$ feet

D) $29\frac{1}{4}$ feet

Add and simplify.

20)

20) _____

$$\begin{array}{r} 5\frac{1}{9} \\ + 12\frac{7}{9} \\ \hline \end{array}$$

A) $16\frac{8}{9}$

B) $5\frac{8}{9}$

C) $17\frac{8}{9}$

D) $18\frac{8}{9}$

Use the order of operations to simplify the expression.

21) $\left(\frac{7}{8}\right)^2 \div \left(\frac{7}{8} - \frac{1}{24}\right)$

21) _____

A) $\frac{21}{160}$

B) $\frac{147}{160}$

C) $\frac{21}{20}$

D) $\frac{245}{384}$

Subtract and simplify.

22)

22) _____

$$\begin{array}{r} 18 \\ - \frac{1}{2} \\ \hline \end{array}$$

A) $18\frac{1}{2}$

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

C) $15\frac{1}{2}$

D) 17

Find the prime factorization of the number. Write any repeated factors using exponents.

23) 946

23) _____

A) $2 \cdot 11 \cdot 43$

B) $11^2 \cdot 43$

C) $22 \cdot 43$

D) $2^2 \cdot 43$

Divide. Write the answer in simplest form.

24) $\frac{3}{19} \div 1$

24) _____

A) $\frac{19}{3}$

B) 1

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

D) $\frac{3}{19}$

Multiply. Write the answer in simplest form. Find both an exact product and an estimated product.

25) $2\frac{1}{4} \cdot 4\frac{1}{3}$

25) _____

A) Exact: $\frac{77}{12}$

B) Exact: $\frac{77}{12}$

C) Exact: $\frac{39}{4}$

D) Exact: $\frac{39}{4}$

Estimate: 8

Estimate: 15

Estimate: 15

Estimate: 8

Solve. Write the answer in simplest form.

26) Approximately $\frac{11}{14}$ of a worldwide corporation's employees live and work in the United States. If

26) _____

34,496 employees live and work in the United States, how many employees does the corporation have worldwide?

A) 43,904 employees

B) 3136 employees

C) 27,104 employees

D) 2464 employees

Subtract and simplify.

27) $\frac{53}{74} - \frac{34}{74}$

27) _____

A) $1\frac{13}{74}$

B) $\frac{19}{74}$

C) $\frac{19}{148}$

D) $24\frac{13}{37}$

Find the least common multiple (LCM) of the list of numbers.

28) 6, 4

28) _____

A) 24

B) 2

C) 12

D) 48

Write the fraction in simplest form.

29) $\frac{18}{27}$

29) _____

A) $\frac{9}{3}$

B) $\frac{18}{27}$

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

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

Use the order of operations to simplify the expression.

30) $\frac{1}{9} + \frac{1}{7} \cdot \frac{1}{6}$

30) _____

A) $\frac{8}{189}$

B) $\frac{1}{189}$

C) $\frac{23}{21}$

D) $\frac{17}{126}$

Answer Key

Testname: MATH830_FRACTION PRACTICE

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