

Name \_\_\_\_\_

**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.**Find the prime factorization of the number. Write any repeated factors using exponents.**

1)  $936$  \_\_\_\_\_

2)  $970$  \_\_\_\_\_

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

3)  $30, 40, 50$  \_\_\_\_\_

4)  $48, 162, 9$  \_\_\_\_\_

**Write the fraction in simplest form.**

5)  $\frac{55}{77}$  \_\_\_\_\_

6)  $\frac{416}{104}$  \_\_\_\_\_

**Multiply. Write the answer in simplest form.**

7)  $\frac{10}{2} \cdot \frac{22}{3}$  \_\_\_\_\_

8)  $5\frac{1}{6} \cdot 2 \cdot \frac{3}{5}$  \_\_\_\_\_

**Insert < or > to form a true statement.**

9)  $\frac{1}{13}$        $\frac{6}{8}$  \_\_\_\_\_

**Perform the indicated operation. Simplify your answers.**

10)  $\frac{7}{9} + \frac{5}{13} + \frac{4}{12}$  \_\_\_\_\_

11)  $\frac{1}{6} \cdot \left(7\frac{1}{2} - \frac{1}{5}\right)$  \_\_\_\_\_

12) \_\_\_\_\_

$17\frac{1}{5}$

$- \frac{4}{5}$

\_\_\_\_\_

**Divide.** Write the answer in simplest form.

13)  $48 \div 1\frac{1}{2}$

13) \_\_\_\_\_

14)  $3\frac{3}{8} \div 9$

14) \_\_\_\_\_

15)  $5\frac{7}{9} \div 1\frac{5}{7}$

15) \_\_\_\_\_

**Multiply.** Write the answer in simplest form.

16)  $2\frac{1}{6} \cdot \frac{3}{7}$

16) \_\_\_\_\_

17)  $5\frac{1}{2} \cdot 5\frac{1}{3} \cdot 5\frac{3}{5}$

17) \_\_\_\_\_

**Solve.**

18)  $-\frac{5}{8} + y = -\frac{1}{24}$

18) \_\_\_\_\_

19)  $6x = \frac{11}{17}$

19) \_\_\_\_\_

20)  $\frac{2}{3}k = 8$

20) \_\_\_\_\_

**TRUE/FALSE.** Write 'T' if the statement is true and 'F' if the statement is false.

21)  $\frac{32}{63}x = -\frac{16}{27}$

21) \_\_\_\_\_

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

22)  $\frac{x}{4} = \frac{x}{5} + \frac{1}{4}$

22) \_\_\_\_\_

23)

Find the quotient. If the quotient is undefined , state undefined.

a)  $\frac{0}{5}$

b)  $\frac{5}{0}$

23)\_\_\_\_\_

24) Simplify the following expression.

24)\_\_\_\_\_

$$\frac{5}{9} - \frac{3}{x} - \frac{6}{x}$$

25) Determine whether the following proportion is true or false

25)\_\_\_\_\_

a)  $\frac{4}{3} = \frac{16}{12}$

b)  $\frac{1}{7} = \frac{12}{72}$

26)

Find the LCD of the following fractions:

26)\_\_\_\_\_

$$\frac{5}{12}, \frac{1}{6}, \frac{3}{5}$$

27)

27) \_\_\_\_\_

If your income is \$5040 a month and you pay  $\frac{3}{5}$  of your income for rent and  $\frac{1}{20}$  of your income for food, how much do you spend each month on these two items.

28)

28) \_\_\_\_\_

Write the following comparison as a ratio in the simplest form.

25 minutes to 5 hours

**Simplify.**

29)  $4[(7 - 4)^2 + (21 - 19)^2 + 11]$

29) \_\_\_\_\_

**Write the mixed number as an improper fraction.**

30)  $25\frac{13}{21}$

30) \_\_\_\_\_

**Write the improper fraction as a mixed or whole number.**

31)  $\frac{59}{11}$

31) \_\_\_\_\_

Answer Key  
Chapter 2

21) FALSE

22) 5

1)  $2^3 \cdot 3^2 \cdot 13$

23) Zero, Undefined

2)  $2 \cdot 5 \cdot 97$

24)  $\frac{5x-81}{9x}$

3) 600

25) True, False

4) 1296

26) 60

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

27) \$3276

6) 4

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

7)  $\frac{110}{3}$

29) 63

8)  $6\frac{1}{5}$

30)  $\frac{538}{21}$

9) <

31)  $5\frac{4}{11}$

10)  $\frac{175}{117}$

11)  $\frac{73}{60}$

12)  $16\frac{2}{5}$

13) 32

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

15)  $3\frac{10}{27}$

16)  $\frac{13}{14}$

17)  $\frac{2464}{15}$

18)  $\frac{7}{12}$

19)  $\frac{11}{102}$

20) 12