#### MAT-061 MODULAR 1 PRACTICE PROBLEMS

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

Round to the nearest thousand.

B) 9000

C) 10000

D) 8700

1) \_\_\_\_\_

Solve.

2) 
$$37 + x = 93$$
  
A)  $56$ 

B) 130

C) 3441

D) 149

3) 
$$3 \cdot y = 81$$
  
A)  $30$ 

B) 28

C) 29

D) 27

3) \_\_\_\_\_

Solve the problem.

4) The height of the tallest building in the town of Chorlton is 1294 feet. It is 101 feet taller than the second tallest building. What is the height of the second tallest building in Chorlton?

4) \_\_\_\_\_

- A) 1192 feet
- B) 1193 feet
- C) 1395 feet

D) 1394 feet

Evaluate.

A) 169

B) 4096

C) 144

D) 24

5) \_\_\_\_\_

Simplify.

6) 
$$3 \cdot 6 + 8(9 + 4) + 4$$

A) 550

B) 126

C) 154

D) 98

6) \_\_\_\_\_

Find all the factors of the number.

7) 28

A) 1, 2, 7, 14, 28

C) 1, 2, 4, 7, 14, 28

B) 2, 7, 14, 28

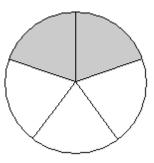
D) 1, 2, 4, 7, 8, 14, 28

7) \_\_\_\_\_

What part of the object or set of objects is shaded?

8





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

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

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

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

### Provide an appropriate response.

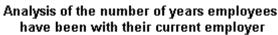
- 9) A company with 1080 total employees prepares the following analysis for the length of time its employees have been with the company. Use the table to answer the question.
- 9)

10) \_\_\_\_\_

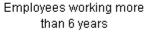
11) \_\_\_\_\_

12)

13)



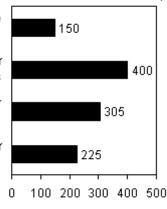




Employees working 6 years or less but more than 4 years

Employees working 4 years or less but more than 2 years

Employees working 2 years or orless



Number of Employess

What is the ratio of the number of employees working 4 years or less but more than 2 years to the number of employees working more than 6 years?

A) 
$$\frac{305}{1080}$$

B) 
$$\frac{150}{305}$$

C) 
$$\frac{305}{150}$$

D) 
$$\frac{1080}{305}$$

Multiply and simplify.

$$10)\frac{5}{6} \cdot \frac{1}{5}$$

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

B) 
$$\frac{5}{30}$$

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

D) 
$$\frac{5}{11}$$

Divide and simplify.

11) 
$$\frac{2}{3} \div \frac{1}{6}$$

A) 4

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

D) 
$$\frac{1}{9}$$

Add and simplify.

12) 
$$\frac{7}{4} + \frac{5}{12}$$

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

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

C) 1

Write fraction notation for the given decimal notation. Do not simplify.

13) 0.88

A)  $\frac{88}{1000}$ 

B) 
$$\frac{88}{100}$$

C)  $\frac{8.8}{10}$ 

D) 
$$\frac{88}{10}$$

Write in decimal notation.

$$14)\frac{91}{10}$$
 14) \_\_\_\_\_

A) 9.1

- B) 0.091
- C) 0.91
- D) 910

Round to the indicated place value.

A) 1.6

B) 1.7

C) 1.8

D) 1.67

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

Solve. Give your answer as a mixed number if appropriate.

$$16) \frac{1}{2} = \frac{x}{15}$$

A) 30

B) 15

- C)  $\frac{1}{30}$
- D)  $7\frac{1}{2}$

Use a proportion to solve the problem.

Find percent notation.

- A) 72%
- B) 36%
- C) 7.2%
- D) 1000%

Translate to an equation and solve. When necessary, round to the nearest hundredth.

- 19) What is 25% of 200? 19) \_\_\_\_\_
  - A) 50

B) 5

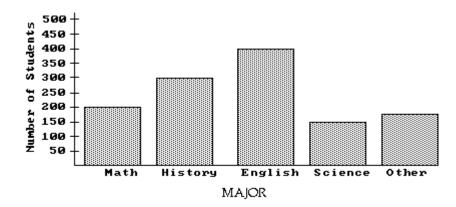
- C) 0.5
- D) 500

Solve the problem.

- 20) A pension fund invests \$101,200 in real estate and earns 8% per year on the investment. How 20) much money is earned per year?
  - A) \$80,960
- B) \$1,265,000
- C) \$8096
- D) \$126,500

Find the average.

The bar graph below shows the number of students by major in the College of Arts and Sciences. Answer the question.



22) How many students are majoring in History?

A) 350

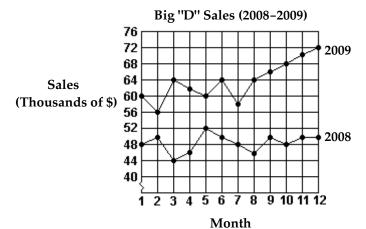
B) 250

C) 300

D) 400

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

Use the graph to answer the question.



23) Which month in 2008 had the lowest sales?

A) Month 6

B) Month 2

C) Month 3

D) Month 8

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

Add. Do not use a number line except as a check.

A) 16.1

B) 1.7

C) -1.7

D) -16.1

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

Subtract.

A) -18

B) 18

C) -12

D) 12

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

# Answer Key

# Testname: MAT-061 MODULE 1 PRACTICE

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