

The actual final exam will have 24 questions: 20 multiple choices (4 points each) and 4 short answers (5 points each). Please do not assume that the content or difficulty level of these practice questions are exactly the same as the actual examination.

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

Write as a percent. Round the percent to the nearest tenth if necessary.

- 1)  $\frac{17}{25}$  1) \_\_\_\_\_  
 A) 34% B) 68% C) 1000% D) 6.8%

Solve the problem.

- 2) What is 50% of \$480? 2) \_\_\_\_\_  
 A) \$24 B) \$480 C) \$240 D) \$24,000

- 3) Alicia sold \$2436 in paintings at the art fair. If she sold 6 paintings total, and they all sold for the same amount, what was the price of one painting? 3) \_\_\_\_\_  
 A) \$442 B) \$306 C) \$411 D) \$406

- 4) The regular price of a ring is \$774.00. During a May jewelry sale, the ring was discounted 45%. What was the sale price of the ring? 4) \_\_\_\_\_  
 A) \$425.70 B) \$349.30 C) \$348.30 D) \$426.70

- 5) At a store selling ice cream, 11 of the cartons melted, and 2 did not melt. What fraction had melted? 5) \_\_\_\_\_  
 A)  $\frac{2}{13}$  B)  $\frac{11}{2}$  C)  $\frac{13}{11}$  D)  $\frac{13}{2}$

- 6) Gina is buying a used car that has an advertised price of \$5000. She is buying the car on credit and must make a down payment of \$900 and 24 monthly payments of \$113. What is the total cost of the car? 6) \_\_\_\_\_  
 A) \$3612 B) \$2812 C) \$2712 D) \$3602

Divide to find the exact answer. Express the answer as a whole or mixed number when possible and simplify.

- 7)  $2\frac{4}{5} \div 7$  7) \_\_\_\_\_  
 A)  $\frac{3}{5}$  B)  $\frac{2}{4}$  C)  $\frac{2}{5}$  D)  $\frac{1}{5}$

Find the average (mean) for the list of numbers.

- 8) Ages of patients (in years) in a clinic: 20, 4, 25, 20 8) \_\_\_\_\_  
 Round answer to the nearest whole number if necessary.  
 A) 4 year(s) B) 20 years C) 16 years D) 17 years

Write the fraction or mixed number as a decimal. Round to the nearest thousandth if necessary.

- 9)  $\frac{17}{21}$  9) \_\_\_\_\_  
 A) 1.235 B) 0.81 C) 8.1 D) 0.081

Find the difference.

10)  $14 - (-12)$  10) \_\_\_\_\_  
A) 26 B) -26 C) -2 D) 2

11)  $(-2) - (-10 + 15)$  11) \_\_\_\_\_  
A) -9 B) -1 C) D) -21

Write the decimal as a fraction or mixed number in lowest terms.

12) 0.82 12) \_\_\_\_\_  
A)  $\frac{41}{500}$  B)  $\frac{1}{82}$  C)  $\frac{41}{50}$  D)  $\frac{1}{6724}$

Find the unknown number in the proportion. Round answer to the nearest hundredth when necessary.

13)  $\frac{x}{22} = \frac{9}{11}$  13) \_\_\_\_\_  
A)  $x = 26.9$  B)  $x = 36$  C)  $x = 4.5$  D)  $x = 18$

Multiply.

14)  $0.008 \times 0.6$  14) \_\_\_\_\_  
A) 0.0048 B) 0.000048 C) 0.048 D) 0.00048

First, use front-end rounding to round each number and estimate the answer. Then, find the exact answer.

15) Pete's grocery bill was \$9.80. He gave the clerk a \$20 bill. How much change should he receive? 15) \_\_\_\_\_  
A) Estimate: \$10; exact: \$9.20 B) Estimate: \$10; exact: \$10.20  
C) Estimate: \$10; exact: \$10.19 D) Estimate: \$10; exact: \$9.80

Simplify the expression by using the order of operations.

16)  $8^2 \cdot 15^3 + (10 - 3) \cdot 2$  16) \_\_\_\_\_  
A) 734 B) 14,414 C) 216,026 D) 216,014

Write the number in scientific notation.

17) 0.000164 17) \_\_\_\_\_  
A)  $1.64 \times 10^{-4}$  B)  $1.64 \times 10^4$  C)  $1.64 \times 10^{-3}$  D)  $1.64 \times 10^{-5}$

Add. Write your answer in lowest terms.

18)  $\frac{1}{4} + \frac{2}{5}$  18) \_\_\_\_\_  
A)  $\frac{3}{5}$  B)  $\frac{13}{20}$  C)  $\frac{1}{3}$  D)  $\frac{7}{10}$

Arrange the group of numbers in order, from least to greatest.

19)  $\frac{1}{2}, \frac{3}{4}, \frac{2}{3}, 0.95$  19) \_\_\_\_\_  
A)  $\frac{2}{3}, \frac{1}{2}, \frac{3}{4}, 0.95$  B)  $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, 0.95$  C)  $\frac{3}{4}, \frac{2}{3}, \frac{1}{2}, 0.95$  D)  $0.95, \frac{3}{4}, \frac{2}{3}, \frac{1}{2}$

Subtract. Write the answer in lowest terms as a mixed number.

$$20) - \begin{array}{r} 17\frac{7}{25} \\ 9\frac{7}{20} \\ \hline \end{array}$$

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

A) 7

B)  $7\frac{93}{100}$

C)  $6\frac{95}{100}$

D)  $8\frac{93}{100}$

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

Solve the problem.

21) A camera costs \$810. If the sales tax rate is 5%, how much tax is charged and what is the total price? Round your answers to the nearest cent. 21) \_\_\_\_\_

Use a proportion to solve the problem.

22) On a map of the Thunderbird Country Club golf course, 2.5 inches represent 60 yards. How long is the 10th hole if the map shows 13.5 inches? 22) \_\_\_\_\_

Solve the problem.

23) David's net pay for a week at the video store was \$59.52. If he worked 12 hours that week, what was his net pay rate? 23) \_\_\_\_\_

24) The regular price of a ring is \$334.00. During a May jewelry sale, the ring was discounted 45%. What was the sale price of the ring? 24) \_\_\_\_\_

Answer Key

Testname: BMCC MAT 008 FINAL EXAM REV VERSION C 112818

- 1) B
- 2) C
- 3) D
- 4) A
- 5) A
- 6) A
- 7) C
- 8) D
- 9) B
- 10) A
- 11) B
- 12) C
- 13) D
- 14) A
- 15) B
- 16) D
- 17) A
- 18) B
- 19) B
- 20) B
- 21) \$40.50, \$850.50
- 22) 324 yards
- 23) \$4.96/hour
- 24) \$183.70