

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.

Solve the problem.

- 1) Gina is buying a used car that has an advertised price of \$4000. She is buying the car on credit and must make a down payment of \$900 and 36 monthly payments of \$109. What is the total cost of the car? 1) _____
- A) \$4024 B) \$3924 C) \$4814 D) \$4824

Write the number in scientific notation.

- 2) 0.000867 2) _____
- A) 8.67×10^{-5} B) 8.67×10^{-3} C) 8.67×10^{-4} D) 8.67×10^4

Solve the problem.

- 3) In a math class, 2 of the students arrived late, and 15 arrived on time. What fraction arrived late? 3) _____
- A) $\frac{2}{17}$ B) $\frac{17}{2}$ C) $\frac{17}{15}$ D) $\frac{15}{17}$

Multiply.

- 4) 0.009×0.6 4) _____
- A) 0.000054 B) 0.0054 C) 0.00054 D) 0.054

Simplify the expression by using the order of operations.

- 5) $4^2 \cdot 3^3 + (13 - 9) \cdot 10$ 5) _____
- A) 472 B) 184 C) 112 D) 652

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

- 6) $\frac{2}{3}$ 6) _____
- A) 6.67 B) 0.067 C) 1.5 D) 0.667

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

- 7) 0.92 7) _____
- A) $\frac{23}{250}$ B) $\frac{23}{25}$ C) $\frac{1}{92}$ D) $\frac{1}{8464}$

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

- 8) $5\frac{5}{8} \div 9$ 8) _____
- A) $\frac{5}{7}$ B) $\frac{6}{8}$ C) $\frac{5}{8}$ D) $\frac{4}{8}$

Add. Write your answer in lowest terms.

9) $\frac{1}{6} + \frac{1}{3}$

9) _____

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

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

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

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

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

10) Carlos's grocery bill was \$8.93. He gave the clerk a \$20 bill. How much change should he receive?

10) _____

A) Estimate: \$9; exact: \$8.93

B) Estimate: \$11; exact: \$11.07

C) Estimate: \$11; exact: \$11.06

D) Estimate: \$11; exact: \$10.07

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

11) Ages of patients (in years) in a clinic: 20, 9, 27, 20

11) _____

Round answer to the nearest whole number if necessary.

A) 20 years

B) 18 years

C) 9 year(s)

D) 19 years

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

12) $\frac{x}{33} = \frac{1}{11}$

12) _____

A) $x = 0.3$

B) $x = 4$

C) $x = 3$

D) $x = 363.0$

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

$17\frac{7}{25}$

13) $9\frac{7}{20}$

13) _____

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

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

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

D) 7

Find the difference.

14) $14 - (-9)$

14) _____

A) -5

B) 5

C) -23

D) 23

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

15) $\frac{4}{5}, \frac{6}{7}, \frac{5}{6}, 0.95$

15) _____

A) $\frac{4}{5}, \frac{5}{6}, \frac{6}{7}, 0.95$

B) $0.95, \frac{6}{7}, \frac{5}{6}, \frac{4}{5}$

C) $\frac{5}{6}, \frac{4}{5}, \frac{6}{7}, 0.95$

D) $\frac{6}{7}, \frac{5}{6}, \frac{4}{5}, 0.95$

Solve the problem.

16) What is 50% of \$100?

16) _____

A) \$5000

B) \$5

C) \$50

D) \$100

Find the difference.

17) $(+5) - (-20 + 8)$

17) _____

A)

B)

C) -22

D)

Solve the problem.

- 18) The regular price of a ring is \$968.00. During a May jewelry sale, the ring was discounted 40%. 18) _____
What was the sale price of the ring?
A) \$387.20 B) \$579.80 C) \$580.80 D) \$386.20

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

- 19) $\frac{51}{100}$ 19) _____
A) 25.5% B) 1000% C) 51% D) 5.1%

Solve the problem.

- 20) Alicia sold \$1274 in paintings at the art fair. If she sold 7 paintings total, and they all sold for the 20) _____
same amount, what was the price of one painting?
A) \$219 B) \$199 C) \$82 D) \$182

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

Use a proportion to solve the problem.

- 21) The ratio of the distances a 7-iron and a 5-iron will drive a golf ball is 5 to 6. If a golfer 21) _____
averages 136 yards with a 7-iron, how far should he average with a 5-iron?
22) Joan can mow a 10-acre field in 5 hours. How long would it take her to mow a 7-acre 22) _____
field?

Solve the problem.

- 23) If Alison's company charged \$177.60 for 5 hours of work, how much did they charge per 23) _____
hour?
24) Bathing suits are often on sale in July. The regular price of one suit is \$42. With a 15% 24) _____
discount, what is the sale price of the suit?

Answer Key

Testname: BMCC MAT 008 FINAL EXAM REV VERSION A 112818

- 1) D
- 2) C
- 3) A
- 4) B
- 5) A
- 6) D
- 7) B
- 8) C
- 9) C
- 10) B
- 11) D
- 12) C
- 13) B
- 14) D
- 15) A
- 16) C
- 17) D
- 18) C
- 19) C
- 20) D
- 21) 163.2 yards
- 22) 3.5 hour(s)
- 23) \$35.52/hour
- 24) \$35.70