Grade 7

Mathematics

Quarter 1 2019 Benchmark Exam

Name: _____

Class: _____

Directions:

- Read each question carefully. SHOW ALL OF YOUR WORK.
- For multiple-choice questions, you must mark your answers on the exam paper and on your answer sheet by darkening the circle for the letter that matches your answer choice.
- For written-response questions, you must write your answers and show of work clearly and legibly in the space provided.

Part One: Multiple Choice

____ /20

Part Two: Short Response

____ /5

Total Score

____ /25

Part I: Multiple Choice

1. What is the decimal equivalent of $\frac{7}{8}$?

A. 0.780 B. 0.870 C. 0.875 D. 0.885

2. Which expression is equivalent to $8c + 6 - 3c - 2$?

A. $5c + 4$ B. $5c + 8$ C. $11c + 4$ D. $11c + 8$

3. Which expression is equivalent to $n + n - 0.18n$?

A. $1.18n$ B. $1.82n$ C. $n - 0.18$ D. $2n - 0.82$

4. What is the value of the expression below?

$$2[3(4^2 + 1)] - 2^3$$

A. 156 B. 110 C. 94 D. 48

5. Which expression is equivalent to $-\frac{1}{3}(6x + 15) - 3$?

A. $-2x + 12$ B. $-2x + 2$ C. $-2x - 2$ D. $-2x - 8$

6. What is the value of the expression $\frac{\left(\frac{2}{3} - \frac{5}{6}\right)}{\frac{3}{4}}$?

A. $-\frac{2}{9}$ B. $-\frac{1}{8}$ C. $\frac{1}{8}$ D. $\frac{2}{9}$

7. Which situation results in a final value of zero?

A. The temperature after a decrease of 5°F from a temperature of -5°F.

B. The height of an airplane after taking off from ground level and rising 1,000 feet.

C. The amount of money received in change after making a \$10 purchase with a \$20 bill.

D. The distance above sea level after increasing 24 meters from a depth of 24 meters below sea level.

8. The water level in an ocean bay changes at an average rate of 3 meters per hour. At this rate, how many hours would it take for the water level to change 12 meters?

A. $\frac{1}{4}$ B. $\frac{1}{3}$ C. 4 D. 36

9. The table below shows the lowest temperature, in degrees Fahrenheit, on each of 5 days for a city.

LOWEST DAILY TEMPERATURES

Day	Temperature($^\circ$F)
Monday	-36°
Tuesday	-25°
Wednesday	12°
Thursday	-3°
Friday	18°

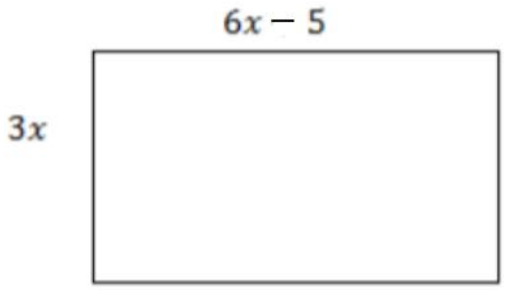
What is the mean lowest temperature, in degrees Fahrenheit, in the city for those 5 days?

A. -18.8° B. -6.8° C. 6.8° D. 18.8°

10. Yesterday, the temperature at noon was 14.4°F. By midnight, the temperature had decreased by 10.7 degrees. What was the temperature at midnight?

A. -3.7°F B. 3.7°F C. 25.7°F D. - 4.3

11. Write an expression for the perimeter of the rectangle below.



12. Mr. Trager has $500.00 to spend at a bicycle store. All prices listed below include tax.

- He buys a new bicycle for $273.98.
- He buys 3 bicycle reflectors for $7.23 each and 1 bicycle helmet for $42.36.
- He plans to use the remaining money to buy new cycling outfits for $78.12 each.

What is the *greatest* number of cycling outfits that Mr. Trager can buy with the remaining money?

Then, simplify your expression to lowest terms.