

First name: _____

Last Initial

User Identification Number: _____

For this component of the study, you will be asked to answer twelve math questions. Please read each question carefully, and then check the circle to the left of the answer that corresponds to the most appropriate response.

-
1. Use the chart below to answer question 1.

Week	1	2	3	4	5	6	7	8
Points	36	53	54	48	41.5	55.5	36	56

Mara participated in a fitness competition at her school. Her points for each of the eight weeks of the competition are shown in this chart. What was Mara's median number of points per week?

- A. 36
- B. 44.75
- C. 47.5
- D. 50.5

-
2. Rockin' Reggie's Music Shop sells about 200 guitar picks each week. Reggie orders picks by the gross (144) from a distributor. About how many gross should Reggie order for a three month supply?

- A. 13
- B. 18
- C. 26
- D. 36

3. Dave and Jeff are planning to drive from New Hampshire to Ohio, a distance of 780 miles. The road atlas gives an estimated driving time that is based on an overall average speed of 50 miles per hour. About how much less time will it take them if Dave and Jeff average 60 miles per hour instead of 50 miles per hour for the whole trip?

- A. 1 ½ hours
- B. 2 ½ hours
- C. 4 hours
- D. 8 hours

4. Art's Garage charges \$48 per hour for labor plus the cost of parts for all car repairs. Jeannine needs to have her car repaired, but can afford at most \$350. If t represents the labor time in hours, and p represents the cost of parts, which inequality models this situation?

- A. $48 + t + p \geq 350$
- B. $48t + p \geq 350$
- C. $48t + p \leq 350$
- D. $48(t + p) \leq 350$

5. A computer network requires people on the network to use a password that is five characters long. The first character must be a letter, and the remaining characters may be either letters or digits (0 to 9). Letters or digits may be used more than once. How many different passwords are possible?

- A. 4,680
- B. 260,000
- C. 39,016,250
- D. 43,670,016

6. The manager of a restaurant is interested in the number of meals served on Saturdays in order to make decisions about staffing. On the first four Saturdays of a month, the mean number of meals served per day was 356. If 411 meals were served on the fifth Saturday, what is the mean number of meals served each Saturday for the whole month?

- A. 367.0
- B. 383.5
- C. 438.2
- D. 458.75

7. Mrs. James handed out markers and sheets of colored construction paper to students in her class. The markers were either blue, black, green, or brown, and the sheets of paper were either green, yellow, or pink. If each student received one marker and one sheet of paper, and the markers and paper were distributed at random, what is the probability that a student received both a green marker and green paper?

- A. $\frac{1}{3}$
- B. $\frac{1}{4}$
- C. $\frac{1}{7}$
- D. $\frac{1}{12}$

8. At Bartonville Middle School, five out of every seven students received an academic and/or sports award. If 225 students received awards, how many students attend Bartonville Middle School?

- A. 45
- B. 90
- C. 315
- D. 540

9. In 1997, the gross national debt was $\$5.36 \times 10^{12}$. The population of the United States at the same time was estimated at 267 million people. Which is the best estimate of the national debt per person in 1997?

- A. \$1,500
- B. \$20,000
- C. \$50,000
- D. \$200,000

10. There are several ways to drive from Concord, New Hampshire, to New York City. Your automobile club provides the following routes.

You have the choice of

- two different routes from Concord to Hartford, Connecticut
- three different routes from Hartford to Westchester County
- three different routes from Westchester County to New York City

How many different ways can you drive from Concord to New York City following the automobile club's routes?

- A. 18
- B. 11
- C. 9
- D. 8

11. In the model town that a class is building, a car 15 feet long is represented by a scale model 3 inches long. If the same scale is used, a house 35 feet high would be represented by a scale model how many inches high?

- A. 175
- B. 7
- C. 5
- D. 45/35

12. There are two rectangles. The first rectangle has a width of 6 units and a length of 10 units. The length of the second rectangle is 5 units greater than the length of the first rectangle, but the two rectangles have the same area. How does the width of the second rectangle compare to the width of the first rectangle?

- A. The width of the second rectangle is 5 units less.
- B. The width of the second rectangle is 2 units less.
- C. The width of the second rectangle is 2 units greater.
- D. The width of the second rectangle is 5 units greater.

There are no more questions to the test. If you would like, feel free to review your answers before giving them to the test proctor.

Thank you!