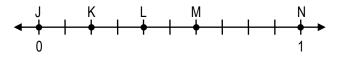
## Math Madness #75

1. The population in town A is eighty-six thousand. nine hundred forty-four. The population of town B is thirty-eight thousand, sixty-four.

How many times greater is the value of the digit 8 in the population in town A then the value of the digit 8 in the population in town B?

- a. 10 times
- c. 1,000 times
- b. 100 times
- d. 10,000 times

- 5. Ms. Nguyen used the rule "add 4" to make a pattern. She started her pattern with the number 4. Which is true about every number in Ms. Nguyen's pattern?
  - a. Every number is odd.
  - b. Every number has a 4 in the ones place.
  - c. Every number is a multiple of 8.
  - d. Every number is a multiple of 2.
- 2. The number line below shows five points labeled J, K, L, M, and N. Which two points have a distance of  $\frac{2}{5}$  between them?

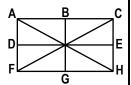


- a. J and M
- c. K and L
- b. K and M
- d. L and N

6. Which line segments appear to be parallel?

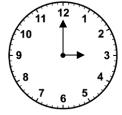


- b. line segments AH and CF
- c. line segments BG and DE
- d. line segments AC and CH



- 3. Christy completed  $\frac{5}{8}$  of her science homework. Teresa completed  $\frac{3}{4}$  of the same assignment. Which statement correctly compares the fractions?
  - a.  $\frac{5}{8} > \frac{3}{4}$  c.  $\frac{3}{4} < \frac{5}{8}$
  - **b.**  $\frac{3}{4} > \frac{5}{8}$  d.  $\frac{5}{8} = \frac{3}{4}$

- 7. At 3:00, the hands on a clock form a 90° angle. What is the measure of the angle formed by the hands of a clock at 1:00?
  - a. 10°
  - b. 15°
  - c. 30°
  - d. 45°



- 4. Which of the following is equal to  $5 \times (22 + 68)$ ?
  - a.  $(5 \times 68) \times 22$
  - b.  $(5 \times 22) + 68$
  - c.  $(5 \times 22) \times (5 \times 68)$
  - d.  $(5 \times 22) + (5 \times 68)$

- 8. The key in a pictograph has a symbol that represents 9 shirts. How many symbols are needed to represent 63 shirts?
  - a. 5
  - b. 6
  - c. 7
  - d. 8



## 9 & 10 (2 points) Short Answer / Extended Response

The perimeter of this rectangle is 24 inches. One side of the rectangle measures 3 inches. Label the lengths of the remaining sides of the rectangle. Be sure to explain how you determined what numbers to use to label the sides of the rectangle.

(Explanations will vary.)

3 in.

9 in.

3 in.

9 in.