MATH MADNESS # 75

1. Which of the following correctly compares nine and forty-two thousandths and nine and fourteen hundredths?

   a. 9.042 > 9.14
   b. 9.042 < 9.14
   c. 9.42 > 9.014
   d. 9.42 < 9.014

5. Mr. Guentzel makes a pattern that starts with 2 and uses the rule "add 4, and then multiply by 2." Which expression can be used to find the third number in Mr. Guentzel's pattern?
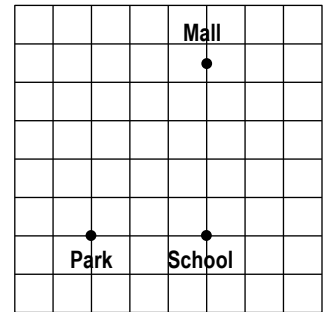
   a. $3[2(2+4)]$
   b. $2[2(2+4)+4]$
   c. $2(2+4) \times 2(2+4)$
   d. $2(2+4) \times 3$

2. Natalie spends 4 hours mowing yards. Each yard takes $\frac{2}{3}$ hour to mow. How many yards did Natalie mow?

   a. $\frac{1}{6}$
   b. $\frac{1}{2}$
   c. $2\frac{2}{3}$
   d. 6

6. Each space on the grid represents $\frac{2}{3}$ mile.

   How much farther is it from the school to the mall than from the school to the park?

   a. 1 mile   c. $2\frac{1}{3}$ miles
   b. 2 miles   d. $3\frac{1}{3}$ miles

   (grid showing Mall, Park, School)

3. Margaret is making a quilt using 36 fabric squares. Each fabric square is the same size.

   • $\frac{2}{3}$ of the fabric squares are blue.
   • $\frac{1}{6}$ of the fabric squares are red.
   • The rest of the fabric squares are white.

   How many fabric squares are white?

   a. 4   c. 12
   b. 6   d. 24

7. Chuck drank 600 **milliliters** of water every day for 2 week. How many **liters** of water did he drink in all?

   a. $7\frac{2}{5}$ liters
   b. $7\frac{1}{2}$ liters
   c. $8\frac{2}{5}$ liters
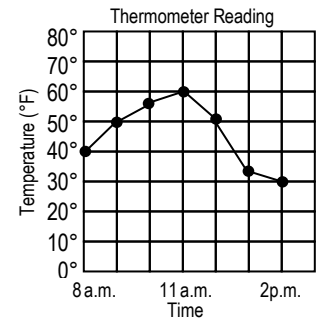   d. $8\frac{1}{2}$ liters

   Helpful Hint: 1 L = 1,000 mL

4. Which expression has half the value of $22 + \frac{1}{2} \times 68$?

   a. $11 + \frac{1}{4} \times 68$
   b. $11 + \frac{1}{2} \times 68$
   c. $22 + \frac{1}{4} \times 34$
   d. $22 + \frac{1}{2} \times 34$

8. Mrs. Gibson's class recorded the temperature outside every hour during a school day.

   Which is **closest** to the temperature at 10 a.m.?

   a. 50° F   c. 60° F
   b. 56° F   d. 65° F

   (line graph: Thermometer Reading, Temperature (°F) vs Time, 8 a.m. to 2 p.m.)

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

Is this statement true? Explain why or why not.

   18 × 15 = (18 × 10) + (18 × 5)

   Yes, 18 × 15 is equal to (18 × 10) + (18 × 5) _____

   _____

   _____

   _____

Show your work here.

   18 × 15 = (18 × 10) + (18 × 5)

   ⇓   ⇓   ⇓

   270   180   +   90

   270   =   270