

"M-ath"letes

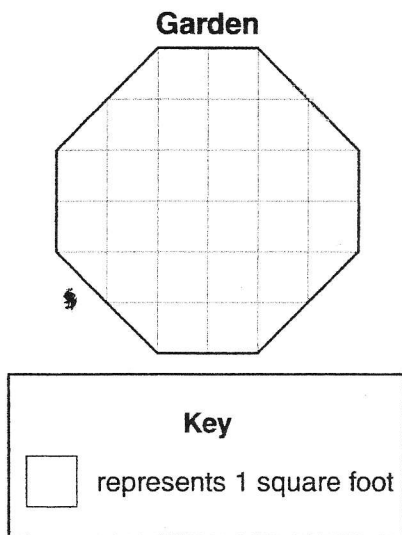
Challenge

2011

Sudden Death

Team Name:

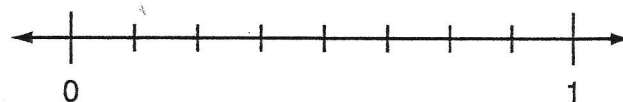
- 1 The picture below shows the shape of a garden.



What is the area of the garden?

- A. 24 square feet
- B. 28 square feet
- C. 32 square feet
- D. 36 square feet

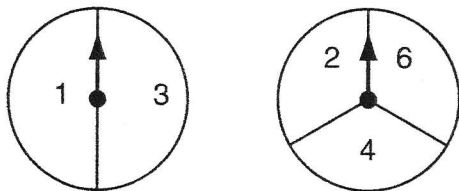
- 2 Part of a number line is shown below.



Which list has the fractions in order from **least to greatest**?

- A. $\frac{3}{8}, \frac{1}{2}, \frac{3}{4}, \frac{7}{8}$
- B. $\frac{3}{8}, \frac{7}{8}, \frac{1}{2}, \frac{3}{4}$
- C. $\frac{1}{2}, \frac{3}{8}, \frac{3}{4}, \frac{7}{8}$
- D. $\frac{1}{2}, \frac{3}{4}, \frac{3}{8}, \frac{7}{8}$

- 3 Mary has these two spinners.



She spins each arrow once and writes down the sum of the two numbers. How many **different** sums are possible?

- A. 2
- B. 3
- C. 4
- D. 5

- 4 The \triangle and \square are different numbers that make this sentence true.

$$\triangle \times 8 = \square$$

Which other number sentence must be true?

- A. $\square \div 8 = \triangle$
- B. $8 \div \square = \triangle$
- C. $\triangle \div \square = 8$
- D. $8 \div \triangle = \square$

5. Karen is playing a number game. The rule is: multiply by 2 for the next number, then add 8 for the number after that. The pattern continues. Which sequence of numbers follows the rule?

A. 1, 3, 24, 26, 52, 54, 108
B. 3, 6, 14, 28, 30, 60, 62
C. 7, 14, 28, 56, 112, 224, 448
D. 12, 24, 32, 64, 72, 144, 152

6. The equation below is used to find the number of model cars (M) in Carlos's model car collection.

$$M \div 39 = 3$$

How many cars are in Carlo's collection, M?

A. 13
B. 36
C. 42
D. 117

7. The total number of days without snow for 6 cities is listed below.













165, 165, 165, 171, 172, 175


What is the median of the set of data?

A. 165
B. 168
C. 171
D. 175

- 8 The pictograph below shows the ages of the campers at Camp Fairweather.

Ages of the Campers

8 years	 
9 years	  
10 years	   
11 years	  

Key	
	represents 6 campers

What is the total number of campers?

- A. 54
- B. 60
- C. 63
- D. 72

- 9 Which expression is equivalent to 12,000?

- A. 10 thousands + 12 hundreds
- B. 11 thousands + 10 hundreds
- C. 1 thousand + 1 hundred + 10 tens
- D. 1 thousand + 10 hundreds + 10 tens

- 10 The chart below shows the amount of money Meg will collect in a walkathon based on the number of miles she walks.

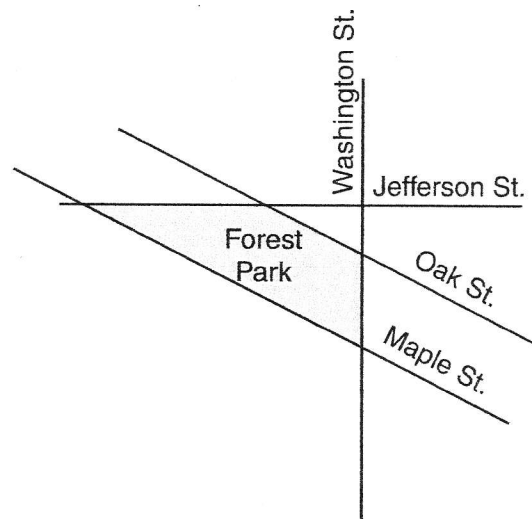
Walkathon Chart

Miles	Money Collected
2	\$26
4	\$34
6	\$42
8	\$50
10	\$58

The pattern in the chart continues. Meg collected \$74 in the walkathon. How many miles did Meg walk?

- A. 12
- B. 14
- C. 16
- D. 18

- 11 In the map below, Maple Street and Oak Street are parallel.



What is the shape of Forest Park?

- A. a square
- B. a rectangle
- C. a rhombus
- D. a trapezoid

12. Alyssa created the pattern shown below using toothpicks.

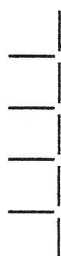
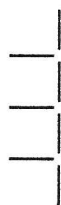


Figure 1

Figure 2

Figure 3

Figure 4

The pattern continues. Exactly how many toothpicks are in Figure 8 in the pattern?

A 11

B 15

C 17

D 18

Mathletes Challenge Round 1 Sudden Death

HAARD

Name: KEY - Crader
Test: 3/2/2011

- B 1. ☐ A ☒ B ☐ C ☐ D - Garden question
- A 2. ☒ A ☐ B ☐ C ☐ D
- C 3. ☐ A ☐ B ☒ C ☐ D
- A 4. ☒ A ☐ B ☐ C ☐ D
- D 5. ☐ A ☐ B ☐ C ☒ D
- D 6. ☐ A ☐ B ☐ C ☒ D
- B 7. ☐ A ☒ B ☐ C ☐ D
- C 8. ☐ A ☐ B ☒ C ☐ D
- B 9. ☐ A ☒ B ☐ C ☐ D
- B 10. ☐ A ☒ B ☐ C ☐ D
- D 11. ☐ A ☐ B ☐ C ☒ D
- C 12. ☐ A ☐ B ☒ C ☐ D