

Green Bay West High Elementary Math Bowl  
May 12, 2011

Name: Key School: \_\_\_\_\_

Team Number: \_\_\_\_\_

**Event 4: Problem Solving**

1. Alexis passes her Grandmother's house on the way to school. Alexis lives 6 blocks from her Grandmother's house and 14 blocks from school. Billy lives half way between Grandmother's house and the school. How far does Billy live from school?

$$14 - 6 = 8$$

$$8 \div 2 = 4$$

Answer: 4 Blocks

2. You buy a dozen donuts and 5 muffins for a total of \$12.25. If each donut costs \$.75, how much does each muffin cost?

$$.75 \times 12 = 9 \text{ cost of donuts}$$

$$12.25 - 9 = 3.25 \text{ cost of 5 muffins}$$

$$3.25 \div 5 = .65 \text{ cost of 1 muffin}$$

Answer: 65¢

3. The chart below shows the math test scores of students in Mrs. Bleeker's class. What score would Jack need to have received for the class average to be a 93%?

Student	Score
Steve	88
Pam	97
Mario	90
Elle	98
Jack	?

$$\frac{88 + 97 + 90 + 98 + x}{5} = 93$$

$$\frac{373 + x}{5} = 93$$

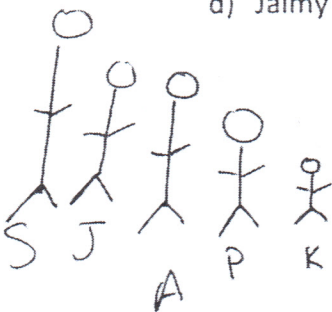
$$373 + x = 465$$

$$x = 92$$

Answer: 92

4. Determine which student, Pete, Katie, Jaimy, Andrew, or Samuel is the tallest given the following facts:

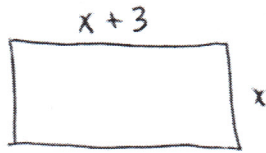
- Pete is taller than Katie.
- Jaimy is shorter than Samuel.
- Andrew is taller than Pete.
- Jaimy and Andrew are the same height.



Answer: Samuel



- 4) Now that they have the key, they read the map and find out that the treasure is buried on the ocean floor. It is located in an area that is in the shape of a rectangle. The rectangle is 3 feet longer than it is wide. The perimeter of the rectangle is 38 feet. What is the area of the rectangle where the treasure is located?



$$L = 11 \quad W = 8$$

$$A = 11(8) = 88$$

$$4x + 6 = 38$$

$$4x = 32$$

$$x = 8$$

Answer: 88

- 5) The hidden treasure was located 20 leagues under the sea. If 1 league is 3 miles, 1 mile is 1760 yards, 1 yard is 3 feet, and 1 foot is 12 inches, how many inches under the sea is the treasure?

$$5 \times 3 = 15 \text{ miles}$$

$$1760 \times 15 = 26400$$

$$26400 \times 3 = 79200$$

$$79200 \times 12 = 950,400$$

Answer: 950,400

- 6) The group found the treasure! Everyone receives a share of the 600 coins inside. Eric receives  $\frac{2}{15}$  of the coins, Stephen receives  $\frac{1}{12}$  of the coins, Kyle receives  $\frac{1}{5}$  of the coins, and Nikki receives  $\frac{1}{4}$  of the coins. How many coins does Kenny receive?

$$\frac{2}{15} \cdot 600 = 80$$

$$\frac{1}{12} \cdot 600 = 50$$

$$\frac{1}{5} \cdot 600 = 120$$

$$\frac{1}{4} \cdot 600 = 150$$

Answer: 200

4 May

Student Name: \_\_\_\_\_

School Name: \_\_\_\_\_

Team: \_\_\_\_\_

### Event 3: Random Hat

- 1) A farmer has 10 little haystacks. If he combines all his hay, how many large haystacks will he have?

1

- 2) 7 posts are placed 10 meters apart in a straight line. A fence runs from the first post to the last post. How long is the fence?



60 meters

- 3) A man starts work at 9:00 a.m. and it takes his 15 minutes to get dressed, 20 minutes to eat and 35 minutes to walk to work. If he has a paper to work on and wants to get to work a quarter of an hour early, what time should he get up?

15  
20  
35  
15 → early  
85

9:00 - 85 min

7:35 AM

- 4) Alice the Alien has a vat of shloop that doubles in volume every minute. If she starts cooking the shloop at 12:00 and it is full at 12:24, at what time was the vat  $\frac{1}{4}$  full?

12:24 full  
12:23  $\frac{1}{2}$  Full  
12:22  $\frac{1}{4}$  full

12:22

- 5) Dale is a literary critic for *Rolling Stone* magazine. He uses 3 pens for every 1,500 words he writes. If Dale writes an average of 7,500 words per day for 5 days in a row, how many pens will Dale use in this five-day period?

$1500 \overline{) 7500}^5$        $5 \times 3 = 15 \text{ pens/day} \times 5 \text{ days} = 75$

75