

Green Bay West High Elementary Math Bowl  
May 7, 2005

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

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

Event 1: Arithmetic

1. Seven people together earned \$136.50. How much money does each person get if they decide to share the money equally?

$$\begin{array}{r} 19.50 \\ 7 \overline{)136.50} \\ \underline{7} \phantom{00} \\ 66 \phantom{0} \\ \underline{63} \phantom{0} \\ 35 \phantom{0} \\ \underline{35} \\ 0 \end{array}$$

\$19.50

2. Find the value and write your answer in simplest fraction form.

$$3.5 \div 28 \div 1\frac{1}{8}$$

$$\frac{28}{8} \div 28 \div \frac{9}{8}$$

$$\frac{28}{8} \times \frac{1}{28} \times \frac{8}{9}$$

$\frac{1}{9}$

3. The scores for a math test were 11, 19, 17, 8, 16, and 19. What is the mean of the scores?

$$\begin{array}{r} 11 \\ 19 \\ 17 \\ 8 \\ 16 \\ 19 \\ \hline 90 \end{array} \quad \begin{array}{r} 15 \\ 6 \overline{)90} \\ \underline{6} \phantom{0} \\ 30 \end{array}$$

15

4. What is the value of  $5^2 + 4 \cdot (3 + 3) - 18 \div 3$  using the order of operations?

$$25 + (4 \cdot (6)) - (18 \div 3)$$

$$25 + 24 - 6$$

43

Green Bay West High Elementary Math Bowl  
May 5, 2005

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

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

Event 2: Problem Solving: Calculator Permitted

1. A math class has 6 students. 2 students have a 92% grade average. The other four students have the following grade percentages: 50%, 64.3%, 83%, and 99%. What is the class average?

$$\begin{array}{r} 92 \\ 92 \\ 50 \\ 64.3 \\ 83 \\ 99 \\ \hline 67480.3 \end{array}$$

$80.05\%$

2. Timmy is 3 years older than his sister Tonya. Tonya's mom is 30 years older than Tonya. In 7 years, Tonya's mom will be 57. How old is Timmy now?

mom 57

Tonya 27 - 7 = 20

Timmy 3 + 20

— 23

3. In the cafeteria, one lunch consists of 1 main course, 1 dessert, and 1 drink. Your choices include:

Main  
Pizza  
Hamburger  
Spaghetti

Drink  
Apple Juice  
Milk  
Water

Dessert  
Cup cake  
Cookie

$6 \times 3 = 18$

How many different lunches can be made with the choices above?

4. Billy is having a birthday party and his mother tells him... "Billy the only way you can have a guest over is if you give each guest a piece of cake." Billy is only allowed to make 4 cuts in the cake. What is the maximum number of guests Billy can have?



$6 \times 2 = 12$

Green Bay West High Elementary Math Bowl  
May 15, 2008

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

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

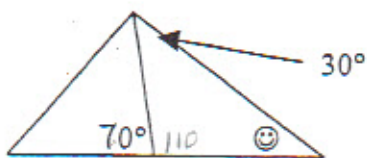
**Event 2: Geometry**

1. Which of the following drawings do not represent prisms? *- bases are parallel*  
*↳ sides are parallelograms*



Answer: A, D

2. In the given diagram, how many degrees is angle ☺ equal to?



$$180 = 110 + 30 + \text{☺}$$

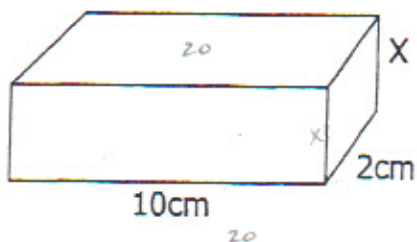
Answer: 40

3. 27 small cubes, each with a side length of 1 inch, are joined together to form one large cube. What is the side length of the large cube?



Answer: 3

4. The surface area of the following diagram is  $136\text{cm}^2$ . Find the value of  $x$ .



$$\begin{aligned} 136 &= 40 + 10x + 10x + 2x + 2x \\ 136 &= 40 + 24x \\ -40 & \quad -40 \\ \hline 96 &= 24x \\ \frac{96}{24} &= \frac{24x}{24} \end{aligned}$$

$$4 = x$$

Answer: 4

Score
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Green Bay West High Elementary Math Bowl  
May 15, 2008

Name: \_\_\_\_\_ School: \_\_\_\_\_  
Team Number: \_\_\_\_\_

**Event 3: Random Hat**

1. A bus leaves Springfield traveling at the rate of 40 miles per hour. A train leaves Shelbyville traveling at the rate of 18 miles every 15 minutes. After one hour, how much further has the train traveled?

bus 40 m/h  
train 18 m / 15 min = 18 x 4 = 72 m/h

$$\begin{array}{r} 72 \\ -40 \\ \hline 32 \end{array}$$

Answer: 32

2. If there are 2.54 centimeters in 1 inch, how many centimeters are in 1.5 foot?

1.5 ft x 12  $\frac{in}{ft}$  = 18 in

$$\begin{array}{r} 2.54 \\ \times 18 \\ \hline 45.72 \end{array}$$

Answer: 45.72

3. You are driving an empty school bus. Ten people get on at the first stop. At the second stop, 4 get on and 1 person gets off. At the third stop, a boy gets on with his dog, and 2 people get off. How many legs are on the bus after the third stop?

2 + 20 + 8 - 2 + 2 + 4 - 4

Answer: 30

4. Mickey, Donald, Goofy, and Minnie are all in a race. Goofy finishes in twice the time it took for Mickey to finish. Donald finishes in one-third the time it took Minnie to finish. Minnie finishes 2 minutes before Mickey. Donald finishes in 4 minutes. Who finished last, and what was their time?

D = 4 min

D = 4 =  $\frac{1}{3}$  x Minnie

Minnie = 12 min.  
Mickey = 14 min  
Goofy = 28

Answer: Goofy 28 min.

Score:

Green Bay Elementary Math Bowl  
April 30, 2009

Student Name(s): \_\_\_\_\_ School Name: \_\_\_\_\_

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

**Team Event**

1)

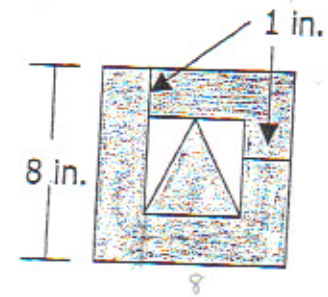
Find the area of the shaded region.  
A triangle is inscribed in 2 squares.

$A_{\square} = 8 \times 8 = 64$

$A_{\Delta} = \frac{1}{2} \times 6 \times 6 = 18$

$A_{\square} = 6 \times 6 = 36$

$64 - 36 + 18$



46 in<sup>2</sup>

2)

The year 2000 marked the beginning of a new millennium. When the digits of the first date of the new millennium, 01-01-00, are added you get the smallest possible sum of any date because  $0 + 1 + 0 + 1 + 0 + 0 = 2$ . What date during the next century, when written in that form, will have the greatest possible sum?

9-29-99

3)

Haretown and Tortoiseville are 72 miles apart. A hare travels at 10 miles per hour toward Tortoiseville, while a tortoise travels at 2 miles per hour toward Haretown. If both set out at the same time, how many miles will the hare have traveled before meeting the tortoise?

H	72	62	52	42	32	22	12
T	0	2	4	6	8	10	12

$72 - 12 = 60$

60 miles

4. George had a bunch of whatsits. He gave  $\frac{1}{2}$  of his whatsits to Jill. Jill only needed  $\frac{2}{3}$  of what he gave here, so she gave the rest back to George. After this, George had 16 whatsits. How many did he start with?



Jill =  $\frac{2}{6}$

George =  $\frac{4}{6} = 16$

$16 = \frac{4}{6}x$

$\frac{3}{2} \cdot 16 = \frac{2}{3}x \cdot \frac{3}{2}$

$16 \times 3 \div 2 = 24$

24

5. A baseball team of 9 players is going for pizza after a win. The team orders enough pizza for each player and the coach to have 2 slices each. After they're done eating, there are 4 slices of pizza left. If there are 8 slices per pizza, and each pizza costs \$5.50, how much did the team pay for the pizzas?

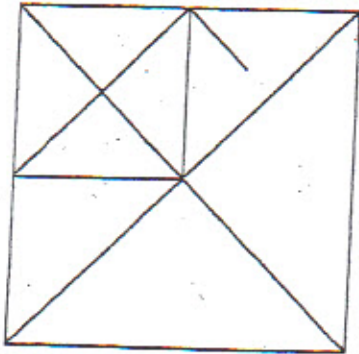
$10 \times 2 = 20$

$8 / \text{pizza} \times 3 = 24$

$\begin{array}{r} 5.50 \\ \times 3 \\ \hline 16.50 \end{array}$

\$ 16.50

6. What is the highest number of triangles possible in the square?



$8 + 8 + 2$

18