

# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> Grade - March 14, 2003

Final Score:

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

Full Name: \_\_\_\_\_

1<sup>st</sup> Score

## Individual Contest - Score Sheet

**DO NOT WRITE IN SHADED REGIONS**

Out of 40

| Answer |  |  |  |
|--------|--|--|--|
| 1      |  |  |  |
| 2      |  |  |  |
| 3      |  |  |  |
| 4      |  |  |  |
| 5      |  |  |  |
| 6      |  |  |  |
| 7      |  |  |  |
| 8      |  |  |  |
| 9      |  |  |  |
| 10     |  |  |  |
| 11     |  |  |  |
| 12     |  |  |  |
| 13     |  |  |  |
| 14     |  |  |  |
| 15     |  |  |  |
| 16     |  |  |  |
| 17     |  |  |  |
| 18     |  |  |  |
| 19     |  |  |  |
| 20     |  |  |  |

| Answer |  |  |  |
|--------|--|--|--|
| 21     |  |  |  |
| 22     |  |  |  |
| 23     |  |  |  |
| 24     |  |  |  |
| 25     |  |  |  |
| 26     |  |  |  |
| 27     |  |  |  |
| 28     |  |  |  |
| 29     |  |  |  |
| 30     |  |  |  |
| 31     |  |  |  |
| 32     |  |  |  |
| 33     |  |  |  |
| 34     |  |  |  |
| 35     |  |  |  |
| 36     |  |  |  |
| 37     |  |  |  |
| 38     |  |  |  |
| 39     |  |  |  |
| 40     |  |  |  |

# "Math is Cool" Championships-2002-03

4<sup>th</sup> Grade - March 14, 2003

## Individual Contest

Express all answers as reduced fractions unless stated otherwise.

Leave answers in terms of  $\pi$  where applicable.

Do not round any answers unless stated otherwise.

Record all answers on the colored cover sheet.

|    |  |
|----|--|
| 1  | Evaluate: 6 times 7  |
| 2  | Evaluate: $2 + 4 + 6 + 8 + 10$   |
| 3  | Evaluate: $99 - 33 + 11$   |
| 4  | If there are four cats and five dogs, how many paws are there?   |
| 5  | What is the perimeter of a rectangle with length 7 and height 3?   |
| 6  | Evaluate: $26 \times 24$ .   |
| 7  | What is the product of the first three positive counting numbers?  |
| 8  | If today is Friday, what day of the week is it 43 days from now?   |
| 9  | Berde pushed his desk 4 yards. How many inches did he push it?   |
| 10 | What is the next number in the following sequence?<br>3, 7, 11, 15, 19, _____  |
| 11 | Keisha makes $\frac{3}{5}$ of her free throws. What percent of her free throws does she make?  |
| 12 | Derek has twelve bowling balls. Jim-Bob has eight bowling balls. After a day of bowling ball battles, Derek lost half of his bowling balls and Jim-Bob lost three. After the second day Jim-Bob lost three more bowling balls and Derek lost half of his remaining bowling balls. Who has the most left? |
| 13 | Evaluate: $423 + 1206 + 4189 + 218$ .  |
| 14 | If there are five people on a winning math team and they all shake hands with each other once, how many handshakes occurred?   |
| 15 | Aaron drank a half-gallon of milk. How many cups of milk did he drink?   |
| 16 | Evaluate: $264 \div 3$ .   |
| 17 | Find the sum of twice 8 and half of 8.   |
| 18 | What type of triangle has three sides of different lengths?  |
| 19 | If I have a bag of 100 twinkies and I eat half of them each morning starting on Monday, how many twinkies do I have left Tuesday afternoon?  |
| 20 | What is the probability of drawing a black king from a regular deck of cards?  |
| 21 | Libbey reaches into a drawer with her eyes closed. If the drawer contains 4 blue socks, 9 red socks, 2 yellow socks, and 7 purple socks, how many socks must she draw to ensure a match?   |
| 22 | What is the sum of the first two prime numbers greater than 10?  |

|    |  |
|----|--|
| 23 | A wholop is five wonkers and three wobols are ten wholops. If I have six wobols then how many wonkers do I have?   |
| 24 | If Colin has five dollars to buy Exploder Candy Bars and each bar costs 65 cents, how many bars can he buy?  |
| 25 | $2 + 8 \div 2 \times 3 + 6 - 4$  |
| 26 | Find the average of the following set of data: 1, 46, 12, 23, 2, 0.  |
| 27 | You plant 6 bags of seed. Each bag contains 22 seeds. If 5 of the seeds in each bag are eaten by birds, how many total seeds are left?   |
| 28 | The Math Team sells candy bars for 49¢ each. They sell 20 candy bars on Monday and 33 candy bars on Tuesday. How much money, in dollars, did they collect all together on both days? |
| 29 | How many grams are in five and one-half kilograms?   |

## Challenge Questions

|    |   |
|----|---|
| 30 | When a number is divided by 9 it has a quotient of 5 and a remainder of 8. What is the number?  |
| 31 | What is the largest possible product of the digits of a 4-digit number?   |
| 32 | If I take a number, subtract 5, then add 50% of the result, I get the original number. What is the original number?   |
| 33 | If a 6 by 6 by 6 cube is made up of 1 by 1 by 1 cubes and the outside is painted orange, how many cubes will have only 2 orange sides?  |
| 34 | For homework, the teacher asked the students to write down a math problem that looked like this:<br>$\begin{array}{r} AB \\ -15 \\ \hline ?? \end{array}$ Lili copied A wrong and got the answer 22. Marissa copied B wrong and got the answer 41. What is the number AB?                 |
| 35 | Josh gains 3 points for every question he gets right on a test and loses 1 point for every question he gets wrong. If his score on a 30-question test is 30 points and he answers every question, how many questions did he get wrong?  |
| 36 | If a circle is inscribed in a square with area 64, what is the circumference of the circle? Leave answer in terms of $\pi$ .  |
| 37 | A polygon has 22 sides. What is the sum of the interior angles of this polygon?   |
| 38 | There were 8 more dogs than cats in the pet show, but only half as many lizards as dogs. If there were 6 cats in the pet show, how many lizards were there?   |
| 39 | If Alyssa has seven pairs of pants, four pairs of shoes, nine shirts, and two hats, how many different outfits can she make? Assume she must wear one of each item listed.  |
| 40 | Einstein, Pythagoras and Fermat all entered a race. The probability that Einstein, Pythagoras and Fermat would win is $\frac{1}{2}$ , $\frac{1}{3}$ , and $\frac{1}{6}$ respectively. Einstein got sick and was unable to run the race. What is the probability that Pythagoras will win? |

# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> Grade - March 14, 2003

|              |
|--------------|
| Final Score: |
|--------------|

School Name \_\_\_\_\_ Team # \_\_\_\_\_  
Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

## Team Multiple Choice Contest-Score Sheet

|                       |
|-----------------------|
| 1 <sup>st</sup> Score |
|-----------------------|

Correct responses are worth 2 points, incorrect responses are worth -1 point and no response is 0 points.

Out of 18

**DO NOT WRITE IN SHADED REGIONS**

| Answer |  |  |  |
|--------|--|--|--|
| 1      |  |  |  |
| 2      |  |  |  |
| 3      |  |  |  |
| 4      |  |  |  |
| 5      |  |  |  |
| 6      |  |  |  |
| 7      |  |  |  |
| 8      |  |  |  |
| 9      |  |  |  |
|        |  |  |  |

# "Math is Cool" Championships-2002-2003

4<sup>th</sup> Grade - March 14, 2003

## Team Multiple Choice Contest

To build a computer, assume one of each part listed below is needed, and assume the more expensive part is higher quality.

|           | Monitor | Case | Graphics Card | Mouse | Keyboard | Hard Drive | CPU (Chip) | Sound Card | CD-ROM |
|-----------|---------|------|---------------|-------|----------|------------|------------|------------|--------|
| Company A | \$220   | \$19 | \$54          | \$32  | \$8      | \$78       | \$45       | \$39       | \$19   |
| Company B | \$199   | \$15 | \$17          | \$16  | \$5      | \$23       | \$83       | \$35       | \$18   |
| Company C | \$230   | \$25 | \$27          | \$26  | \$15     | \$99       | \$47       | \$25       | \$15   |

### Questions

|   |  |
|---|--|
| 1 | Which Company sells the cheapest CD-ROM?<br>a) Company A   b) Company B   c) Company C   |
| 2 | What is the price of the highest quality hard drive in dollars?<br>A) 78   B) 99   C) 83   D) 199   E) Answer not given  |
| 3 | Which Company has the greatest number of parts that are the cheapest for each type of part?<br>A) Company A   B) Company B   C) Company C  |
| 4 | If you want to build a complete computer with just Company A parts, how much would it cost in dollars?<br>a) 514   b) 411   c) 509   d) 360   e) Answer not given  |
| 5 | If you wanted to build the cheapest computer possible, how much would it cost in dollars?<br>A) 514   B) 309   C) 411   D) 360   E) Answer not given   |
| 6 | If you wanted to build the highest quality computer how much would it cost?<br>A) 411   B) 514   C) 594   D) 604   E) Answer not given   |
| 7 | Company C wants to offer a 10% discount if you buy all your parts from them. How much, in dollars, would you save if you built one complete computer with this special discount, compared to buying all parts from company C without the discount?<br>A) 458.10   B) .90   C) 50.90   D) 51.40   E) Answer not given |
| 8 | You built several computers and the total cost of cases was \$112. How many computers did you build if you used at least one case from each Company A, B and C?<br>A) 7   B) 4   C) 5   D) 6   E) Answer not given   |

- 9 You built a computer using the prices given. The cost of the Monitor and case together was \$245. The cost of the case and the graphics card together was \$42. The cost of the mouse and keyboard together was \$47. The cost of the keyboard and hard drive together was \$38. The cost of the CPU (chip), sound card, and CD-ROM together was \$95. What could be the total cost of the computer?
- A) 467   B) 442   C) 399   D) 360   E) Answer not given

# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> Grade - March 14, 2003

Final Score:

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

## Team Contest-Score Sheet

DO NOT WRITE IN SHADED REGIONS

1<sup>st</sup> Score

Out of 10

| Answer |  |  |  |
|--------|--|--|--|
| 1      |  |  |  |
| 2      |  |  |  |
| 3      |  |  |  |
| 4      |  |  |  |
| 5      |  |  |  |
| 6      |  |  |  |
| 7      |  |  |  |
| 8      |  |  |  |
| 9      |  |  |  |
| 10     |  |  |  |
|        |  |  |  |

# "Math is Cool" Championships-2002-03

4<sup>th</sup> Grade - March 14, 2003  
Team Contest

Leave answers in terms of  $\pi$  where applicable.  
Do not round any answers unless stated otherwise.  
Record all answers on the colored cover sheet.

|    |   |
|----|---|
| 1  | Evaluate $A + A + A + A + A + B + B + B + B + B + B + B + B$ when $A = 2$ and $B = 7$ .   |
| 2  | What is the remainder when 346 is divided by 4?   |
| 3  | Find the 8 <sup>th</sup> Term:<br>0, 2, 6, 12, 20...  |
| 4  | A number line is drawn on the gym floor. Cody starts at point 9 on the number line and Damien starts at point 23. If start at the same time and walk towards each other at the same speed, on what number will they meet? |
| 5  | Half of the perimeter of a certain square is 16 inches. Find the number of square inches in the area of the square.   |
| 6  | How many minutes are in the year 2003?  |
| 7  | What is the sum of the first five prime numbers?  |
| 8  | What is 75% of 40?  |
| 9  | What is the next number in the following sequence?<br>1, 1, 2, 3, 5, 8, 13, 21, 34...   |
| 10 | The sum of three consecutive numbers is 105. What is the middle number?   |



4<sup>th</sup>

|  |
|--|
| Practice relay<br>Person#1<br>5 + 3                            |
| Practice relay<br>Person#2<br>TNYWG - 4                        |
| Practice relay<br>Person#3<br>TNYWG times 3                    |
| Practice relay<br>Person#4<br>TNYWG - 1                        |
| Relay #1<br>Person#1<br>Find 4+3+2+1                           |
| Relay#1<br>Person#2<br>Find TNYWGx3                            |
| Relay#1<br>Person#3<br>Find TNYWG/5                            |
| Relay#1<br>Person#4<br>Convert TNYWG feet into inches          |
| Relay#2<br>Person#1<br>Find 7x8                                |
| Relay#2<br>Person#2<br>Find TNYWG-37                           |
| Relay#2<br>Person#3<br>Find the first prime number after TNYWG |
| Relay#2<br>Person#4<br>Find TNYWG-19                           |

# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> Grade - March 14, 2003

Final Score:

School Name \_\_\_\_\_ Team # \_\_\_\_\_  
 Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

## Practice Relay - Score Sheet

| Answer for person #1 | Answer for person #2 | Answer for person #3 | Answer for person #4 |
|----------------------|----------------------|----------------------|----------------------|
|                      |                      |                      |                      |
| 1 or 0               | 1 or 0               | 1 or 0               | 2 or 0               |

|                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|
| 1 or 0               | 1 or 0               | 1 or 0               | 2 or 0               |
|                      |                      |                      |                      |
| Answer for person #1 | Answer for person #2 | Answer for person #3 | Answer for person #4 |

## Practice Relay - Score Sheet

"Math is Cool" Championships -- 2002-03  
 4<sup>th</sup> Grade - March 14, 2003  
 School Name \_\_\_\_\_ Team # \_\_\_\_\_  
 Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

Final Score:

4<sup>th</sup>

Practice relay  
Person#1  
5 + 3

|  |
|--|
|  |
|--|

4<sup>th</sup>

Practice relay  
Person#1  
5 + 3

|  |
|--|
|  |
|--|

4<sup>th</sup>

Practice relay  
Person#1  
5 + 3

|  |
|--|
|  |
|--|

4<sup>th</sup>

Practice relay  
Person#1  
5 + 3

|  |
|--|
|  |
|--|

Practice relay  
Person#2  
TNYWG - 4

Practice relay  
Person#2  
TNYWG - 4

Practice relay  
Person#2  
TNYWG - 4

Practice relay  
Person#2  
TNYWG - 4

Practice relay  
Person#3  
TNYWG times 3

Practice relay  
Person#3  
TNYWG times 3

Practice relay  
Person#3  
TNYWG times 3

Practice relay  
Person#3  
TNYWG times 3

Practice relay  
Person#4  
TNYWG - 1

Practice relay  
Person#4  
TNYWG - 1

Practice relay  
Person#4  
TNYWG - 1

Practice relay  
Person#4  
TNYWG - 1

# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> Grade - March 14, 2003

Final Score:

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

## Relay #1 Contest - Score Sheet

| Answer for person #1 | Answer for person #2 | Answer for person #3 | Answer for person #4 |
|----------------------|----------------------|----------------------|----------------------|
|                      |                      |                      |                      |
| 1 or 0               | 1 or 0               | 1 or 0               | 2 or 0               |

|                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|
| 2 or 0               | 1 or 0               | 1 or 0               | 1 or 0               |
|                      |                      |                      |                      |
| Answer for person #4 | Answer for person #3 | Answer for person #2 | Answer for person #1 |

## Relay #1 Contest - Score Sheet

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

4<sup>th</sup> Grade - March 14, 2003

"Math is Cool" Championships -- 2002-03

Final Score:

4th

Relay #1  
Person#1  
Find  $4+3+2+1$

---

---

4th

Relay #1  
Person#1  
Find  $4+3+2+1$

---

---

4th

Relay #1  
Person#1  
Find  $4+3+2+1$

---

---

4th

Relay #1  
Person#1  
Find  $4+3+2+1$

---

---



Relay#1  
Person#2  
Find TNYWGx3

Relay#1  
Person#2  
Find TNYWGx3

Relay#1  
Person#2  
Find TNYWGx3

Relay#1  
Person#2  
Find TNYWGx3

Relay#1  
Person#3  
Find TNYWG/5

Relay#1  
Person#3  
Find TNYWG/5

Relay#1  
Person#3  
Find TNYWG/5

Relay#1  
Person#3  
Find TNYWG/5

Relay#1

Person#4

Convert TNYWG feet into inches

Relay#1

Person#4

Convert TNYWG feet into inches

Relay#1

Person#4

Convert TNYWG feet into inches

Relay#1

Person#4

Convert TNYWG feet into inches

# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> Grade - March 14, 2003

Final Score:

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

## Relay #2 Contest - Score Sheet

| Answer for person #1 | Answer for person #2 | Answer for person #3 | Answer for person #4 |
|----------------------|----------------------|----------------------|----------------------|
|                      |                      |                      |                      |
| 1 or 0               | 1 or 0               | 1 or 0               | 2 or 0               |

|                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|
| 1 or 0               | 1 or 0               | 1 or 0               | 2 or 0               |
|                      |                      |                      |                      |
| Answer for person #1 | Answer for person #2 | Answer for person #3 | Answer for person #4 |

## Relay #2 Contest - Score Sheet

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

4<sup>th</sup> Grade - March 14, 2003

"Math is Cool" Championships -- 2002-03

Final Score:

4<sup>th</sup>

Relay#2  
Person#1  
Find 7x8

---

---

4<sup>th</sup>

Relay#2  
Person#1  
Find 7x8

---

---

4<sup>th</sup>

Relay#2  
Person#1  
Find 7x8

---

---

4<sup>th</sup>

Relay#2  
Person#1  
Find 7x8

---

---

Relay#2  
Person#2  
Find TNYWG-37

Relay#2  
Person#2  
Find TNYWG-37

Relay#2  
Person#2  
Find TNYWG-37

Relay#2  
Person#2  
Find TNYWG-37

Relay#2

Person#3

Find the first prime number after TNYWG

Relay#2

Person#3

Find the first prime number after TNYWG

Relay#2

Person#3

Find the first prime number after TNYWG

Relay#2

Person#3

Find the first prime number after TNYWG

Relay#2  
Person#4  
Find TNYWG-19

Relay#2  
Person#4  
Find TNYWG-19

Relay#2  
Person#4  
Find TNYWG-19

Relay#2  
Person#4  
Find TNYWG-19



# "Math is Cool" Championships -- 2002-03


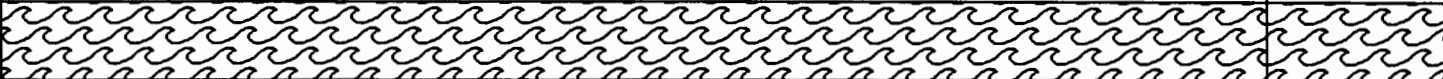
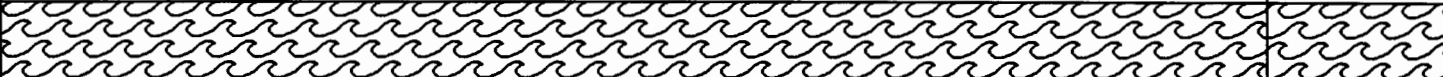
4<sup>th</sup> Grade - March 14, 2003

Final Score:

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

## Mental Math - Score Sheet

|   |  |  |
|---|--|--|
| 1   |  |  |
| 2   |  |  |
| 3   |  |  |
| 4   |  |  |
|    |  |  |
| 1   |  |  |
| 2   |  |  |
| 3   |  |  |
| 4   |  |  |
|  |  |  |
| 1   |  |  |
| 2   |  |  |
| 3   |  |  |
| 4   |  |  |
|  |  |  |
| 1   |  |  |
| 2   |  |  |
| 3   |  |  |
| 4   |  |  |

# "Math is Cool" Championships-2002-03

4<sup>th</sup> Grade - March 14, 2003

## Mental Math Contest

Express all answers in terms of radicals and  $\pi$ , where applicable, unless otherwise instructed.

| Person #1 |   |             |
|-----------|---|-------------|
| 1         | What is the product of 4 and 5?   | 20          |
| 2         | What is 46 divided by 2?  | 23          |
| 3         | What is 13 plus 12?   | 25          |
| 4         | How many dimes are in 3 dollars?  | 30[dimes]   |
| Person #2 |   |             |
| 1         | What is 45 minus 25?  | 20          |
| 2         | What is 7 times 4?  | 28          |
| 3         | What is the perimeter of a square with side length 5?   | 20          |
| 4         | How many nickels are in 4 dollars?  | 80[nickels] |
| Person #3 |   |             |
| 1         | What is 6 times 5?  | 30          |
| 2         | What is 25 plus 17?   | 42          |
| 3         | What is 26 divided by 2?  | 13          |
| 4         | What is 47 minus 19?  | 28          |
| Person #4 |   |             |
| 1         | What is the area of a square with side length 7?  | 49          |
| 2         | What is 52 minus 15?  | 37          |
| 3         | What is 14 plus 74?   | 88          |
| 4         | If you have 2 quarters, 3 dimes, 5 nickels, and 7 pennies, how much money do you have in cents? | 112[cents]  |

"Math is Cool" Championships -- 2002-03

4<sup>th</sup> Grade - March 14, 2003

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

| College Bowl #1 | College Bowl #2 | College Bowl #3 |
|-----------------|-----------------|-----------------|
|                 |                 |                 |
| 7               | 7               | 7               |

Do not use tally marks

Do not use tally marks

| College Bowl #1 | College Bowl #2 | College Bowl #3 |
|-----------------|-----------------|-----------------|
|                 |                 |                 |
| 7               | 7               | 7               |

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

"Math is Cool" Championships -- 2002-03  
4<sup>th</sup> Grade - March 14, 2003

# "Math is Cool" Championships-2002-03

4<sup>th</sup> Grade - March 14, 2003

| <u>College Knowledge Bowl Questions #1</u>                   |  |              |
|--|--|--------------|
| 1  | Three clowns can hold 12 balloons. How many balloons can 5 clowns hold?  | 20[balloons] |
| 2  | Today is Friday. What day of the week is it 23 days after today?   | Sunday       |
| 3  | Joe has 3 friends. If he spends the same amount of time with each one in a 24 hour day, how many minutes does he spend with each friend? | 480[minutes] |
| 4  | How many ways can you arrange the letter in the word MATH?   | 24[ways]     |
| 5  | What is the perimeter of a pentagon with sides of length 7,3,4,6,and 10?   | 30           |
| 6  | Whitney makes pink heart-shaped cupcakes. If his square cupcake pan holds 16 cupcakes, how many cupcakes are on each side?               | 4            |
| 7  | What is 16 divided by $\frac{1}{2}$ ?  | 32           |
| Number <u>8</u> is an extra question. Only use it if needed. |  |              |
| 8  | What is the sum of the digits of the number that results from doubling 13?   | 8            |

# "Math is Cool" Championships-2002-03

4<sup>th</sup> Grade - March 14, 2003

| <u>College Knowledge Bowl Questions #2</u>                   |  |             |
|--|--|-------------|
| 1  | What is the sum of the first 11 positive odd numbers?  | 121         |
| 2  | How many inches are in 4 yards?  | 144[inches] |
| 3  | How many quarts are in two gallons?  | 8[quarts]   |
| 4  | It takes 3 bales of hay to feed a cow. How many bales will it take to feed 4 cows?   | 12[bales]   |
| 5  | On a scale of one to ten of cuteness, cats score a 9.9 every time. Dogs only score a 3.3. How many times more cute is a cat than a dog?  | 3[times]    |
| 6  | Plastic frogs cost 84 cents to make. The 4 <sup>th</sup> grade class sells them for \$3 a piece. How much profit will the 4 <sup>th</sup> grade class earn if it sells 10 plastic frogs? | [\$]21.60   |
| 7  | How many ways can 5 horses get 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> place in a race?  | 60[ways]    |
| Number <u>8</u> is an extra question. Only use it if needed. |  |             |
| 8  | If 80% of my mystery number is 72, what is 10% of my mystery number?   | 9           |

# "Math is Cool" Championships-2002-03

4<sup>th</sup> Grade - March 14, 2003

| <u>College Knowledge Bowl Questions #3</u>                   |  |           |
|--|--|-----------|
| 1  | What is 88 subtracted from 1000?   | 912       |
| 2  | Fifteen cows can eat at most all the grass on 45 acres.<br>How many acres of grass at most can one cow eat?  | 3[acres]  |
| 3  | A certain tree grows 9 inches every year. How many years will it take for the tree to grow 6 feet?   | 8 [years] |
| 4  | Four dogs and three chickens run a race. How many feet are in the race?  | 22[feet]  |
| 5  | What time will it be 70 minutes after 6:19 a.m.?   | 7:29 a.m. |
| 6  | If my number is multiplied by 3, the product is less than 20. My number is a counting number. What is the largest it could be?                     | 6         |
| 7  | Courtney and Liz want to divide the money in a jar equally. The jar has 4 quarters, a dime, and two nickels. How many cents will each of them get? | 60[¢]     |
| Number <u>8</u> is an extra question. Only use it if needed. |  |           |
| 8  | How many centuries are there in 3 millenia?  | 30        |

# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> grade - April 18, 2003

Key

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

Full Name: \_\_\_\_\_

1<sup>st</sup> Score

## Individual Contest - Score Sheet

**DO NOT WRITE IN SHADED REGIONS**

Out of 40

|    | Answer         | 1 or 0 | 1 or 0 |
|----|----------------|--------|--------|
| 1  | 42             |        |        |
| 2  | 30             |        |        |
| 3  | 77             |        |        |
| 4  | 36[paws]       |        |        |
| 5  | 20             |        |        |
| 6  | 624            |        |        |
| 7  | 6              |        |        |
| 8  | Saturday       |        |        |
| 9  | 144[inches]    |        |        |
| 10 | 23             |        |        |
| 11 | 60[%]          |        |        |
| 12 | Derek          |        |        |
| 13 | 6036           |        |        |
| 14 | 10[handshakes] |        |        |
| 15 | 8[cups]        |        |        |
| 16 | 88             |        |        |
| 17 | 20             |        |        |
| 18 | scalene        |        |        |
| 19 | 25[twinkies]   |        |        |
| 20 | 1/26 or 2/52   |        |        |

|    | Answer                 | 1 or 0 | 1 or 0 |
|----|------------------------|--------|--------|
| 21 | 5[socks]               |        |        |
| 22 | 24                     |        |        |
| 23 | 100[wonkers]           |        |        |
| 24 | 7[bars]                |        |        |
| 25 | 16                     |        |        |
| 26 | 14                     |        |        |
| 27 | 102[seeds]             |        |        |
| 28 | [\$]25.97              |        |        |
| 29 | 5500[grams]            |        |        |
| 30 | 53                     |        |        |
| 31 | 6561                   |        |        |
| 32 | 15                     |        |        |
| 33 | 48[cubes]              |        |        |
| 34 | 57                     |        |        |
| 35 | 15[questions]          |        |        |
| 36 | 8π                     |        |        |
| 37 | 3600[°]                |        |        |
| 38 | 7[lizards]             |        |        |
| 39 | 504[outfits]           |        |        |
| 40 | 2/3 or some equivalent |        |        |

"Math is Cool" Championships -- 2002-03

4<sup>th</sup> grade - March 14, 2003

Key

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

**Team Multiple Choice Contest-Score Sheet**

1<sup>st</sup> Score

Correct responses are worth 2 points, incorrect responses are worth -1 point and no response is 0 points.

Out of 18

**DO NOT WRITE IN SHADED REGIONS**

|   | Answer | -1, 0 or 2 | -1, 0 or 2 |
|---|--------|------------|------------|
| 1 | C      |            |            |
| 2 | B      |            |            |
| 3 | B      |            |            |
| 4 | A      |            |            |
| 5 | D      |            |            |
| 6 | E      |            |            |
| 7 | C      |            |            |
| 8 | D      |            |            |
| 9 | A      |            |            |
|   |        |            |            |



# "Math is Cool" Championships -- 2002-03

4<sup>th</sup> grade - March 14, 2003

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

|              |
|--------------|
| <h1>Key</h1> |
|--------------|

|                       |
|-----------------------|
| 1 <sup>st</sup> Score |
|-----------------------|

Out of 10

## Team Contest-Score Sheet

DO NOT WRITE IN SHADED REGIONS

|    | Answer            | 1 or 0 | 1 or 0 |
|----|-------------------|--------|--------|
| 1  | 66                |        |        |
| 2  | 2                 |        |        |
| 3  | 56                |        |        |
| 4  | 16                |        |        |
| 5  | 64[square inches] |        |        |
| 6  | 525600[minutes]   |        |        |
| 7  | 28                |        |        |
| 8  | 30                |        |        |
| 9  | 55                |        |        |
| 10 | 35                |        |        |
|    |                   |        |        |

"Math is Cool" Championships -- 2002-03

4<sup>th</sup> grade - March 14, 2003

School Name \_\_\_\_\_ Team # \_\_\_\_\_

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_

Key

Relay Contest - Score Sheet

|                     |
|---------------------|
| Practice relay      |
| 8                   |
| 4                   |
| 12                  |
| 11                  |
| Answer for relay #1 |
| 10                  |
| 30                  |
| 6                   |
| 72                  |
| Answer for relay #2 |
| 56                  |
| 19                  |
| 23                  |
| 4                   |