

# "Math is Cool" Championships - 2004-05

Sponsored by: Western Polymer Corporation

5th Grade - March 18, 2005

Individual Contest - Written by Colin S

## GENERAL INSTRUCTIONS

*Good sportsmanship is expected throughout the competition by all involved. Bad sportsmanship may result in disqualification. Calculators may not be used on any portion of this contest. Express all non-integer answers as fractions unless stated otherwise or it is a problem dealing with money and in that case, a decimal answer should be given. For 5<sup>th</sup> and 5th grade, all fractions and ratios must be reduced. Units are not necessary unless it is a problem that deals with time and, in that case, am or pm is needed. However, if you choose to use units, they must be correct. Leave all answers in terms of B where applicable. Do not round any answers unless stated otherwise. Record all answers on the colored cover sheets in the answer column only. Make sure all answer sheets have all the information filled out at the top of the sheet. **Tests will be scored as a 0 if answers are not recorded correctly on the answer sheets. Blank answer sheets and answer sheets with no name will also be scored as a 0.***

## INDIVIDUAL TEST - 35 minutes

*When you are prompted to begin, tear off the colored sheet and begin testing. Make sure your name and school are recorded on the answer sheet. This test is scored as a 1 or 0. Express all non-integer answers as fractions unless stated otherwise or it is a problem dealing with money and in that case, a decimal answer should be given. For 5<sup>th</sup> & 5th grade, make sure all fractions and ratios are reduced. Units are not needed except on questions that deal with time and, in that case, a.m. or p.m. is needed. If you choose to use units, you must use them correctly. Record your answers on the score sheet. No talking during the test.*

Record all answers on the colored cover sheet.

1	Josh has pens in his book bag. If he has two black pens, two red pens, and eight pink pens, how many pens does Josh have in total?
2	A tennis ball can holds three tennis balls. A case of tennis balls holds twelve cans. How many tennis balls are in a case of tennis balls?
3	Rebecca had \$10000 but lost \$999 of it. How much does she have now, in dollars?
4	Express $120/450$ as a reduced fraction.
5	What is the quotient of 117 and 39?
6	Evaluate: $2.387 \times 1.4$ [Express your answer as a decimal.]
7	What is 70% of 2000?

8	What is $\frac{1}{2} + \frac{2}{3} + \frac{3}{4}$ ? Express as a mixed number.
9	True or False: A rhombus is always a square.
10	What is $\frac{2}{5}$ times $\frac{3}{7}$ divided by $\frac{4}{7}$ ?
11	What is the next number in the pattern: 1, 4, 9, 16, 25, 36, ...
12	Colin's SuperDuperSoaker can spray 45 gallons of water per second. If Colin sprays Josh with 765 gallons of water, how many seconds does he spray Josh for?
13	Which of the following is the greatest? $\frac{3}{2}$ , $\frac{2}{3}$ , $\frac{5}{6}$ , -2, 1.25
14	Mr. Sampson's class has 36 students. If there are two girls for every one boy, how many boys are there?
15	A triangle with a base of 5 inches and a height of 10 inches is cut out of a rectangular piece of poster board that measures 12 in $\times$ 18 in. What is the area of the remaining poster board, in square inches?
16	Colin is driving to the store from his house. Half way there he realizes he forgot his wallet and drives home and then to the store. If he has driven 24 miles total to the store, how far away is the store from Colin's house, in miles?
17	Nathan has only octopedes and decapedes in his bug collection. An octopede has 8 legs, and a decapede has 10 legs. If Nathan counts 17 bugs and 156 legs, how many decapedes are there?
18	On Monday Josh gave half of his cookies to Colin. On Tuesday he gave two thirds of his remaining cookies to Keisha. On Wednesday he gave three fourths of his remaining cookies to Lee. Josh now has 5 cookies. How many cookies did he give to Colin?
19	Jack has been flipping a fair coin. His last five tosses were all heads. What is the probability he flips two consecutive tails in his next two tosses?
20	A fenced in square is 10 feet on a side. The fencing material is rearranged into a rectangle with sides of 9 feet and 11 feet. By what percentage did the area decrease?
21	A Sampson number is a number that when divided by 7 the remainder is 1 and when divided by 5, the remainder is also 1. 36 is a Sampson number. What is the first Sampson number after 36?
22	Seven mathletes-in-training each shake hands with one another. How long, in seconds, does this take if 3 handshakes occur per second?
23	An interpretive dancer makes 5 steps every 6 seconds. If she dances for 2 minutes, how many steps does she take?
24	Josh walks 3 miles to the east, then 4 miles to the south. If he then walks in a circle with the center being the point at which he started, what is the circumference of the circle along which he walks, in miles?
25	What is the sum of the positive factors of 12?

26	Josh has a drawer of 14 red socks, 6 blue socks, 8 white socks, and 4 black socks. How many socks must he drawn at random in order to ensure he gets a pair of red socks?
27	Megan rolls two fair six-sided dice. What is the probability that she rolls a sum of 4?
28	What is the probability Colin draws a heart, an ace, or a club out of a standard deck of 52 cards in one draw?
29	How many ways can you make change for 53 cents using only quarters, dimes and/or pennies?

## Challenge Questions

30	Find the sum of the first 14 positive integers.
31	Lee scored an 80 on each of his first three 100-point tests. What is the difference between the greatest mean average he could have after four tests and the smallest mean average he could have after four tests?
32	Merck's baseball team lost its first 10 games. If it never lost another game and finished with an 80% winning percentage, how many games were in Merck's season?
33	Two trains are racing around the planet Tycho. If Train A is twice as fast as Train B and they start on opposite sides of planet Tycho and go in the same direction, how many times will Train A go around Tycho before catching Train B?
34	Josh's pencil pouch has 4 #2 pencils. How many #3 pencils should he have to have three #3 pencils for every two #2 pencils?
35	What is the sum of the next two terms in the series 1, 2, 4, 8, ...?
36	Colin is pushing a boulder up a 65 foot hill. Colin can push the boulder up the hill 12 feet each day. What is the maximum whole number of feet the boulder could roll back down the hill each night so that it takes Colin 7 days to push the boulder up the hill?
37	Two dogs 50 miles apart are racing towards each other. One is running at 10 miles per hour and the other at 15 miles per hour. While the dogs are running towards each other a flea jumps back and forth between their noses at 40 miles per hour. How many miles does the flea jump before being squished between the dogs' noses?
38	There are 3 widgets in a whatsit, 2 whatsits in 3 whoozits, 2 whoozits in 12 whatchamacallits, and 4 whatchamacallits in 5 wazzas. If Tom has 24 widgets, how many wazzas does he have?
39	Rebecca goes to the store where she buys five plants. If the store sells three types of plants, how many different combinations of plants can she buy?
40	Colin is two times Josh's age. Five years ago, Josh was one year older than two-fifths of Colin's age. How old will Colin be when Josh is Colin's age now, in years?

# "Math is Cool" Championships - 2004-05

Sponsored by: Western Polymer Corporation

5th Grade - March 18, 2005

Team Multiple Choice Contest - Written by Amanda Hochstatter

**TEAM MULTIPLE CHOICE** - 15 minutes

*This test is the only test where you will be penalized for incorrect responses. You will receive 2 points for a correct letter response, 0 points for leaving it blank and -1 point for an incorrect response. When you are prompted to begin, tear off the colored sheet, pass out a copy of the test to each team member, and begin testing. Since this is a multiple choice test, ONLY a letter response should be listed as an answer on the answer sheet.*

Nathan's Birthday is next Saturday and he would like to have a party at his house. The following is a list of supplies that will be needed for the party and a chart of the price for each item.

List of Items	Pricing	
	Items to get	Price Each
1 chocolate cake	Chocolate cake	\$18.95
1 vanilla cake	Vanilla cake	\$18.95
1 ice-cream cake	Ice-cream cake	\$26.75
1 gallon of ice-cream	1 gallon of ice-cream	\$6.99
150 balloons	1 bag of 25 balloons	\$4.50
3 rolls of streamers	1 roll of streamers	\$5.25
15 silly strings	Silly string	\$3.99
6 bags of candy	1 bag of candy	\$1.95
48 pop cans	Box of 12 pop cans	\$10.25
2 bags of ice	1 bag of ice	\$2.50
40 invitations	10 invitations	\$.99

1	Nathan sends out 40 invitations. Three people cannot make it to the party. Sixteen people have to leave early and fourteen people will be late. How many of his friends will be at the party the whole time, if no one who arrived early leaves late?  A) 5      B) 6      C) 7      D) 10      E) Answer not given
2	In every bag of balloons, one balloon doesn't work. Nathan accidentally pops one balloon in every bag. Every third person to leave takes a balloon home. After all the guests are gone, how many inflated balloons were at Nathan's house?  A) 46      B) 64      C) 92      D) 126      E) Answer not given

3	<p>There are 90 pieces of candy in each bag. <math>\frac{1}{3}</math> of the pieces in each bag are chocolate candy, <math>\frac{1}{6}</math> are suckers, and <math>\frac{1}{2}</math> are fruit candy. If Nathan puts all 6 bags in a bowl, how many suckers does the bowl contain?</p> <p>A) 15      B) 45      C) 180      D) 90      E) Answer not given</p>
4	<p>If Nathan buys at least three silly strings, they are discounted by a dollar each. How much would the silly string cost for the party with this discount?</p> <p>A) \$14.95    B) \$44.85    C) \$54.85    D) \$58.85    E) Answer not given</p>
5	<p>Nathan's mom will not spend more than \$175 on his party. So Nathan agrees to buy the cans of pop and the balloons. How much does Nathan spend?</p> <p>A) \$86.85    B) \$75.45    C) \$64.35    D) \$30.99    E) Answer not given</p>
6	<p>The chocolate cake is 9 inches wide by 13 inches long by 2 inches deep. To the nearest cent, how much does a 1 inch by 1 inch by 1 inch piece of cake cost?</p> <p>A) \$0.06    B) \$0.08    C) \$0.12    D) \$0.24    E) Answer not given</p>
7	<p>The next day after Nathan's party, the store discounted all boxes of 12 cans of pop by 15%. How much, in dollars, would this have saved Nathan?</p> <p>A) \$34.85    B) \$26.14    C) \$8.71    D) \$6.10    E) Answer not given</p>
8	<p>How much does the food and drink cost? (ice included)</p> <p>A) \$88.84    B) \$98.59    C) \$129.34    D) \$133.84    E) Answer not given</p>
9	<p>How much does everything on the list cost, assuming none of the above discounts apply?</p> <p>A) \$232.93    B) \$235.90    C) \$205.15    D) \$240.40    E) Answer not given</p>

# "Math is Cool" Championships - 2004-05

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5th Grade - March 18, 2005

Team Contest - Written by Tom Clymer

## TEAM TEST - 15 minutes

*When you are prompted to begin, tear off the colored sheet and give a copy of the test to each of your team members and begin testing. This test is scored as a 1 or 0. Express all non-integer answers as fractions unless stated otherwise or it is a problem dealing with money and in that case, a decimal answer should be given. For 5<sup>th</sup> & 5th grade, make sure all fractions and ratios are reduced. Units are not needed except on questions that deal with time and, in that case, a.m. or p.m. is needed. If you choose to use units, you must use them correctly.*

1	What is the surface area, in square centimeters, of a rectangular block with edges measuring three centimeters, four centimeters, and five centimeters?
2	What is the largest possible product of two two-digit numbers?
3	What is the sum of all the two-digit prime numbers whose digits differ by three?
4	I think of my favorite number, divide it by eight, add thirty-four, multiply by three, and subtract 108, resulting in 213. What is my favorite number?
5	Five people are each six feet four inches tall. When one of them stands on another's shoulders, their total height is eleven feet ten inches tall, because of the distance lost between the lower one's head and shoulders. When all of the people stand on one another's shoulders so that they are five people tall, what is their total height, in inches?
6	What is the least common multiple of nine, five, and six?
7	What is the greatest number of triangles you can make from four line segments?
8	A family of three, orders four hot dogs and three sodas at the fair. If they spent \$19.95 and the hot dogs were \$3.45 apiece, how much does a single soda cost, in dollars?
9	An ant starts his trip from his anthill, and proceeds to travel 6 feet north, then 4 feet east, then 2 feet south, then 2 feet east and finally travels north for 4 feet. How far, in feet, is the ant from his anthill by way of a direct path?
10	Find the sum of the perfect squares between 50 and 100, inclusive.

# "Math is Cool" Championships - 2004-05

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Relay Contest - Written by Cameron Frederick

**RELAYS** - 5 minutes per relay

*There is no talking during this event and you must always be facing forward. Person #1 will be given an answer sheet(s) and will need to fill out the top. The proctor will hand out a strip of paper to each person. These need to be face down on your desk until it is time for the relay to start. Once the relay begins, everyone may turn over their strip of paper and begin working. You may write on the strip of paper to come up with your answer. However, when person #1 figures out his/her problem, he/she will record **just his/her final answer** on the answer sheet and pass only the answer sheet back to the person behind. This continues until person #4 puts an answer on the answer sheet and gives it to the proctor. A correct answer from person #1, #2 and #3 is worth 1 point each. A correct answer from person #4 is worth 2 points making each relay worth 5 points. You will see the expression **TNYWG** [Proctor: write this on the board] which means: "the number you will get". This is where you put your teammate's answer that they pass back to you, and then you should be able to solve your question. Once the relay begins, turn over your strip of paper and **make sure you have the right person number**. Remember, no talking and remain facing forward to avoid being disqualified!*

	<b>Practice Relay</b>	Answer
Person 1	Evaluate: $14 \times 8$	112
Person 2	TNYWG - 54	58
Person 3	Find the remainder when TNYWG is divided by 3.	1
Person 4	TNYWG - 1	0
	<b>Relay #1</b>	Answer
Person 1	What is the area of a square with a side length of 4?	16
Person 2	How many quarts are in TNYWG cups?	4
Person 3	TNYWG/8 multiplied by $\frac{3}{4}$ .	$\frac{3}{8}$
Person 4	TNYWG $\times$ 24	9
	<b>Relay #2</b>	Answer
Person 1	What is the units digit of the product of 382 and 8?	6
Person 2	What is the diameter of a circle with a radius of TNYWG?	12
Person 3	What is TNYWG divided by $\frac{4}{3}$ ?	9
Person 4	What is the name of the polygon with TNYWG sides?	Nonagon

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Final Score:

**KEY**

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

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_ Division: \_\_\_\_\_

## Mental Math Contest - Written by Joel Turtle

*When it is time to begin, I will read the first question twice. You may not do any writing or talking while arriving at a solution. Once you have a solution, record it on the sheet in front of you. You may not erase or cross out answers once you have written an answer down. If there are eraser marks or crossed out answers, they will be marked wrong. Once all students have laid their pencils on the desk, another question will be asked. If a student doesn't lay his/her pencil down, the maximum wait time is 30 seconds from the second reading of the question before another question is asked. The value of each question is a one or zero. Each student will be asked four questions, then another member of your team will come up.*

PERSON 1 NAME:		1 or 0
1.1	What is 9 times 12?	108
1.2	How many sides does an octagon have?	8
1.3	Evaluate the square root of 121.	11
1.4	What is the product of the first three prime numbers?	30
PERSON 2 NAME:		
2.1	What is one-eighth of 32?	4
2.2	What is the perimeter of a square with area 49?	28
2.3	Evaluate: 3 cubed.	27
2.4	Divide 1024 by 8.	128
PERSON 3 NAME:		
3.1	If John has 130 dimes, how many dollars does he have?	[\$] 13
3.2	What is 79 times the only even prime?	158
3.3	Compute 35 divided by 7.	5
3.4	What is the perimeter of a regular hexagon with side length 5?	30
PERSON 4 NAME:		
4.1	What is the area of a square with side length 6?	36
4.2	Evaluate: 10 factorial divided by 8 factorial	90
4.3	What is two-fifths of 40?	16
4.4	What is the area of a right triangle with legs 5 and 12?	30



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## Division 1

### COLLEGE KNOWLEDGE BOWL ROUND #1

Written by Jie T & Kristina

#	Problem	Answer
1	If $x\%$ of 100 is 20, what is $x\%$ of 80?	16
2	At the Rock's seafood shop, one has a choice between four types of soda, two types of salad, and three entrées. How many possible dinners can be assembled that include exactly one soda, one salad, and one entrée?	24 [dinners]
3	What is the area of a square with perimeter 6?	$9/4$ [ $\text{un}^2$ ]
4	Captain Jack Sparrow has ten apples. He gives half of them to his sister, and then gave three of them to his friends. How many apples does he have left?	2 [apples]
5	What positive number multiplied by itself gives a product of 169?	13
6	What is the fourth positive odd number plus the product of two and seven?	21
7	What are the chances of getting at least one head on two flips of a fair coin?	$3/4$
	Extra Problem - Only if Needed	
8	What is the smallest positive number that can be divided evenly by both 30 and 12?	60

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## Division 1

### COLLEGE KNOWLEDGE BOWL ROUND #2

Written by Jie T & Kristina

#	Problem	Answer
1	Grace has 2 yellow balloons and 3 red balloons. Her brother, Caleb, is going to pop two of the balloons at random. What is the probability that he pops one of the yellow balloons and one of the red balloons?	3/5
2	What is the mean average of five, seven, and twelve?	8
3	If oranges cost 13 cents each, how many oranges could one buy with a dollar?	7 [oranges]
4	How many diagonals can be drawn in a regular hexagon?	9 [diag]
5	Fifteen foolish ferrets are dancing around in the forest. How many weasels need to join in the dancing to make sure that only one-fourth of the dancers are foolish ferrets?	45 [weasels]
6	Find the point 5 units below and 2 units to the right of the point named by the ordered pair (10, 10) on a coordinate grid. Give your answer as an ordered pair.	(12, 5)
7	How many integers are there from 7 to 19, inclusive?	13 [int]
7.1	Extra Problem - Only if Needed	
8	How many lines can be drawn between four distinct points in a plane if no more than two points lie on any straight line?	6 [lines]

# "Math is Cool" Championships - 2004-05

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5th Grade - March 18, 2005

## Division 1

### COLLEGE KNOWLEDGE BOWL ROUND #3

Written by Jie T & Kristina

#	Problem	Answer
1	The sum of two numbers is forty-two. If the difference between the numbers is six, what is the smaller of the two numbers?	18
2	What is 17 squared minus 13 squared?	120
3	Kristina is having a race with a penguin. Kristina runs at three feet per second, while the penguin can waddle five feet per second. If they start from the same spot, after two minutes and fifteen seconds, by how many feet will the penguin be ahead of Kristina?	270 [feet]
4	Rachel can do three math problems a minute. How many minutes will it take for her to do 450 math problems if she must stop for a ten minute break after every hour she works?	170 [min]
5	What time is it 67 minutes before 2:33 p.m.?	1:26 p.m.
6	What is the perimeter of an octagon with side length $3\frac{1}{2}$ ?	28
7	What is $\frac{3}{8}$ of 32 added to the product of $\frac{5}{12}$ and 36?	27
	Extra Problem - Only if Needed	
8	How many minutes are in one week?	10080 [min]

# "Math is Cool" Championships - 2004-05

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5th Grade - March 18, 2005

## Division 2

### COLLEGE KNOWLEDGE BOWL ROUND #1

Written by Tom Tosch

#	Problem	Answer
1	How many prime numbers are there between 20 and 40	4
2	What is the area of an isosceles right triangle if one of legs has a length of 8?	32
3	There are 3 boys to every 4 girls in the third grade. If this ratio is also true for the whole school, how many total students are in the school if there are 90 boys total?	210 [students]
4	George brought cupcakes to share at school. He gave half of them to Mary then half of what was left to Pete, half of what was left to Jane and ate the remaining 3 himself. How many cupcakes did George bring to school?	24 [cupcakes]
5	What is the sum of the integers from -9 to 10?	10
6	How many multiples of 2 or 3 are there between 1 and 30?	20
7	What is the probability of getting a sum of 3 on three rolls of a fair 6-sided dice?	1/216
	Extra Problem - Only if Needed	
8	What is the least common multiple of 6 and 10 multiplied by the greatest common factor of 6 and 10?	60

# "Math is Cool" Championships - 2004-05

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5th Grade - March 18, 2005

## Division 2

### COLLEGE KNOWLEDGE BOWL ROUND #2

Written by Tom Tosch

#	Problem	Answer
1	Tom lives 1 mile from school. Having walked one-third of the way to school one day, he realized he forgot his homework and had to go back for it and then walk to school. How many total miles did Tom walk that morning getting to school?	5/3 [miles]
2	What is the average of 37, 27, 28 and 32?	31
3	I have 5 pieces of candy to divide between Bob, Jim and Carol. If I want to give everyone at least one piece, how many ways can I divide the candy?	6 [ways]
4	What is five sixths minus three-fourths?	1/12
5	A square is drawn along with its two diagonals, how many triangles of any size are in the figure?	8 [triangles]
6	What point is halfway between the points (5, 3) and the point (-1, 9)?	(2,6)
7	How many multiples of 2 are there between 14 and 46 inclusive?	17
7.1	Extra Problem - Only if Needed	
8	What is the smallest number greater than 1 that has a remainder of 1 when divided by 2, 3, 5 and 7	211

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5th Grade - March 18, 2005

## Division 2

### COLLEGE KNOWLEDGE BOWL ROUND #3

Written by Tom Tosch

#	Problem	Answer
1	What is the sum of the even numbers from 2 to 50 minus the sum of the odd numbers from 1 to 49?	25
2	What is the length of the hypotenuse of a right triangle with leg lengths of 18 and 24?	30
3	There are 5 blue marbles and 5 red marbles in a bag and two are randomly drawn. What is the probability that both marbles are the same color	4/9
4	Paul's school starts at 8:30am. He needs to arrive 20 minutes early and it takes him 25 minutes to walk to school and 40 minutes to get ready. What time does he need to get up?	7:05 am
5	How many ways are there to rearrange the letters in the word S-C-H-O-O-L?	360 [ways]
6	If 1 piece of paper is 0.002 inches thick, how many inches thick is a stack of 750 papers? Express your answer as a decimal.	1.5 [in]
7	What is $1 + 2 + 3 + \dots + 20$ ?	210
	Extra Problem - Only if Needed	
8	What is -1 to the power 2005?	-1

# "Math is Cool" Championships - 2004-05

5th Grade - March 18, 2005

Final Score:  
**KEY**

First Score

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

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

**STUDENT NAME** \_\_\_\_\_ **Division:** \_\_\_\_\_

## Individual Contest - Score Sheet

**DO NOT WRITE IN SHADED REGIONS**

	Answer	1 or 0	1 or 0
1	12 [pens]		
2	36 [tennis balls]		
3	[\$] 9001		
4	4/15		
5	3		
6	3.3418		
7	1400		
8	1 11/12		
9	False		
10	3/10		
11	49		
12	17 [sec]		
13	3/2		
14	12 [boys]		
15	191 [in <sup>2</sup> ]		
16	12 [miles]		
17	10 [decap]		
18	60 [cookies]		
19	$\frac{1}{4}$		
20	1 [%]		

	Answer	1 or 0	1 or 0
21	71		
22	7 [sec]		
23	100 [steps]		
24	10 $\pi$ [miles]		
25	28		
26	20 [socks]		
27	1/12		
28	7/13		
29	10 [ways]		
30	105		
31	25		
32	50 [games]		
33	1 [time]		
34	6 [#3 pen]		
35	48		
36	3 [ft]		
37	80 [miles]		
38	90 [wazzas]		
39	21 [comb]		
40	60 [yrs old]		

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5th Grade - March 18, 2005

Final Score:  
**KEY**

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

First Score  
  
(out of 18)

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

Division: \_\_\_\_\_

## Team Multiple Choice Contest - Score Sheet

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

**DO NOT WRITE IN SHADED REGIONS**

	Answer	-1, 0 or 2	-1, 0 or 2
1	C		
2	D		
3	D		
4	B		
5	E (\$68)		
6	B		
7	E (\$6.15)		
8	C		
9	B		



# "Math is Cool" Championships - 2004-05

5th Grade - March 18, 2005

Final Score:  
**KEY**

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

First Score  
(out of 10)

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

Div: \_\_\_\_\_

## Team Contest - Score Sheet

DO NOT WRITE IN SHADED REGIONS

Answer		1 or 0	1 or 0
1	94 [cm <sup>2</sup> ]		
2	9801		
3	88		
4	584		
5	340 [in]		
6	90		
7	4 [tri]		
8	[\$] 2.05		
9	10 [ft]		
10	245		

# "Math is Cool" Championships -- 2004-05

KEY

5th Grade - March 18, 2005

School: \_\_\_\_\_ Team # \_\_\_\_\_

Proctor: \_\_\_\_\_ Room # \_\_\_\_\_ Div \_\_\_\_\_

## PRACTICE RELAY

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
<b>112</b>	<b>58</b>	<b>1</b>	<b>0</b>
1 or 0	1 or 0	1 or 0	2 or 0

## RELAY # 1

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
<b>16</b>	<b>4</b>	<b>3/8</b>	<b>9</b>
1 or 0	1 or 0	1 or 0	2 or 0

## RELAY # 2

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
<b>6</b>	<b>12</b>	<b>9</b>	<b>Nonagon</b>
1 or 0	1 or 0	1 or 0	2 or 0

# "Math is Cool" Championships - 2004-05

Sponsored by: Western Polymer Corporation

5th Grade - March 18, 2005

Final Score:

(Out of 16)

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

Proctor Name \_\_\_\_\_ Room # \_\_\_\_\_ Division: \_\_\_\_\_

*When it is time to begin, I will read the first question twice. You may not do any writing or talking while arriving at a solution. Once you have a solution, record it on the sheet in front of you. **You may not erase or cross out answers once you have written an answer down.** If there are eraser marks or crossed out answers, they will be marked wrong. Once all students have laid their pencils on the desk, another question will be asked. If a student doesn't lay his/her pencil down, the maximum wait time is 30 seconds from the second reading of the question before another question is asked. The value of each question is a one or zero. Each student will be asked four questions, then another member of your team will come up.*

PERSON 1 NAME:		1 or 0
1.1		
1.2		
1.3		
1.4		
PERSON 2 NAME:		
2.1		
2.2		
2.3		
2.4		
PERSON 3 NAME:		
3.1		
3.2		
3.3		
3.4		
PERSON 4 NAME:		
4.1		
4.2		
4.3		
4.4		

# "Math is Cool" Championships - 2004-05

5th Grade - March 18, 2005

Final Score:
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First Score
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School Name \_\_\_\_\_ Team # \_\_\_\_\_

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

**STUDENT NAME** \_\_\_\_\_ **Division:** \_\_\_\_\_

## Individual Contest - Score Sheet

**DO NOT WRITE IN SHADED REGIONS**

	Answer	1 or 0	1 or 0
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

	Answer	1 or 0	1 or 0
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

# "Math is Cool" Championships - 2004-05

5th Grade - March 18, 2005

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

First Score
(out of 18)

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

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

Division: \_\_\_\_\_

## Team Multiple Choice Contest - Score Sheet

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

**DO NOT WRITE IN SHADED REGIONS**

	Answer	-1, 0 or 2	-1, 0 or 2
1			
2			
3			
4			
5			
6			
7			
8			
9			

# "Math is Cool" Championships - 2004-05

5th Grade - March 18, 2005

Final Score:

First Score

(out of 10)

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

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

Div: \_\_\_\_\_

## Team Contest - Score Sheet

DO NOT WRITE IN SHADED REGIONS

	Answer	1 or 0	1 or 0
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			