"Math is Cool" Championships – 2008-09

Sponsored by:

6th Grade – February 6, 2009

Individual Contest

GENERAL INSTRUCTIONS applying to all tests:

- *Good sportsmanship is expected throughout the competition by all involved. Bad sportsmanship may result in disqualification.*
- *Calculators or any other aids may not be used on any portion of this contest.*
- *Unless stated otherwise:*
  - *For problems dealing with money, a decimal answer should be given.*
  - *Express all rational, non-integer answers as reduced common fractions.*
- *For fifth and sixth 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 π 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. Each problem is scored as a 1 or 0. Record your answers on the score sheet. No talking during the test. You will be given a 5 minute warning.

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Individual Contest

Record all answers on the colored cover sheet.

1	Find the difference between 100001 and 999.
2	What is the remainder when 417 is divided by 7?
3	How many centimeters are in one meter?
4	Round to the nearest hundredths place: 268.8253 Write your answer as a decimal if needed.
5	Calculate: QTπ where Q=3, T=7, and π=3.14. Write your answer as a decimal using the substitution given for π.
6	What is the mean of the following data? 2,3,3,6,6,7,8
7	My rhino can do the rumba in the rain while drawing rhombuses. You try and impress me with your squirrel who can salsa in the sunshine while drawing squares. However, my question to you is does your squirrel draw rhombuses while doing the salsa in the sunshine?
8	Evaluate: $\frac{2}{3} + \frac{3}{11}$
9	What is 8 factorial?
10	How many ways can I arrange the letters of 'BABY'?
11	What is the least common multiple of 12 and 15?
12	Order these letters from greatest to least: A = -0.9 B = -0.99 C = -0.09
13	Units are incredibly important in real life. What are the correct UNITS to the following question: There are 23 people and 5 cars, and each car can hold up to 5 people. How many people will be in the last car if the other cars are filled?
14	Charlie drinks water at a rate of 16 ounces per hour. How many hours will it take him to drink 76 ounces of water? Express your answer as a decimal.
15	Write 15% as a fraction.

16	Nicole observes a flat escalator has a speed of 2 miles per hour. Brad is on the escalator and walks at a speed of 1 mile per hour relative to the escalator in the same direction as the escalator. What speed does Nicole observe Brad moving, in miles per hour?
17	Kristy gets 9 hours of sleep each night. What is the reduced ratio of hours she spends sleeping to hours she spends awake in a week? Express your ratio in the form of a:b.
18	Write 0.000072900 in scientific notation.
19	My fraction has a denominator of 8 and a numerator of 42. What is my fraction in reduced form?
20	Evaluate: 5-7+6-8
21	How many cups are in a gallon?
22	David and Brandt have a ball named Goof. They determine who gets to carry Goof each day depending on what nth day it is of the current year. If n is odd David gets the ball and if n is even, Brandt gets the ball. For example, if it is January 6th, then it is the 6th day of the current year and Brandt would get to carry Goof that day. If today is May 25th and it's not a leap year who gets the ball?
23	Lucy wants to buy a shirt that costs $15.00 but has to take the sales tax of 7% into account. How many dollars will the shirt cost including tax? [Express answer as a decimal.]
24	It takes me exactly 37 minutes to get ready for school and an additional 18 minutes to arrive at school and be in my seat. My school starts at 7:56 AM but I was 3 minutes early today. What time did I wake up?
25	Evaluate: $\left[\frac{1}{2}\sqrt[3]{8}\right]^2 + 7 * 2$
26	What is the median of the first 25 prime numbers?
27	I have one fair eight sided die and one fair five sided die. What is the probability I will roll a prime sum when I toss both dice?
28	On David's drive to Mission Ridge to go skiing, the traffic was light and he drove the 45 mile trip in one hour. However, the roads were icy on the return trip, so the return trip took him two hours. What was his average speed, in miles per hour, for the round trip?
29	What is the volume of a sphere with diameter of 2π, in un^3?
30	A line segment is drawn between the point (6,6) and (-15,-15). What is the positive degree measure of the angle between the x-axis and the line?

Challenge Questions

31 Caleb spins 450° to the left and then 360° to the right and then an additional 180° to the left. What is the shortest distance, in degrees, from his original position and in which direction clockwise or counter clockwise?

32 Madam Hippo has her own currency consisting of Hips, Haps, and Hops. 28 Hips is the same as 16 Haps. 21 Haps is the same as 7 Hups. 14 Hups is the same as 4 Hops. If one United States dollar is equal to 7/8 of one Hip, how much, in US dollars, is one Hop worth?

33 Starting with zero, I assign Z = 1, E = 2, R = 3 and O = 4, then I move to one and assign N = 5 since E and O already have values assigned to them. Which letter of the alphabet is assigned the number 19?

34 In a field of daisies there are daisies with 21 petals, 34 petals, and 55 pedals. Thirteen daisies are picked with a total of 435 petals. There are only 4 daisies with 55 petals. How many daisies have 21 petals?

35 Bert's bees bumble every 4.5 seconds. For every 450 bumbles a bee makes, one tube of chapstick is produced. How many whole tubes of chapstick are made in one day if one bee bumbles a whole day?

36 What is 765_9 minus 4321_5 in base 2?

37 The following table represents data forming a linear pattern. Find the sum of the missing values.

Input x	2	7		-3		-4	3
Output y	10		8	-10	22		14

38 A poll shows that 70% of the voters in Moses Lake favor a bond to finance a "Math is Cool" Academy. Suppose five voters are selected at random. Find the probability that exactly two of them will vote in favor of the bond. Express answer as a decimal.

39 Grace swam h events at p swim meets in 2007 and swam p events at h swim meets in 2008. What is a simplified expression using h and p representing the average number of events Grace swam at a swim meet during 2007 and 2008?

40 Brittany and Daniel have a summer lawn mowing business. Brittany can mow Mrs. Hochstatter's lawn in 45 minutes working alone, while Daniel can mow Mrs. Hochstatter's lawn in one and one half hours working alone. Mrs. Hochstatter has both of them come over and working together, they mow her lawn. Mrs. Hochstatter pays $1.60 per minute for the time it takes the two of them to mow the lawn together. If they work the same rate as if they worked alone and wanted to split the money they earned in a fair manner, how much money, in dollars, would Brittany's share be out of the total money Mrs. Hochstatter pays them? Express answer as a decimal.

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Team Multiple Choice Contest

Amanda is the shift leader at a concession stand at her local pool over the summer. Her concession stand is open to the public for 8 hours a day, 7 days a week. Here is a list of all the items and the prices.

Hot dog	$2.00	Slushies	$2.00
Hamburger	$3.00	Bottled Drinks	$2.00
Cheese Burger	$3.50	Energy Drinks	$2.50
Burrito	$1.50	16 oz Soda	$1.00
Kids Meal	$3.00	32 oz Soda	$2.00
Pretzel w/cheese	$2.50	Frozen Lemonade	$3.00
Pizza	$2.50	Candy	$1.00
Fries	$2.00	Chips	$1.00
Chicken Basket	$5.00	Ice Cream Cone	$1.50
Ranch Sauce	$0.50	Jolly Ranchers	$0.25

1	How many hours a week is the concession stand open to the public? A) 8 hours B) 48 hours C) 56 hours D) 64 hours E) Answer not given
2	Amanda has to be at work 30 minutes before opening and stays 30 minutes after closing to count money. It takes Amanda 13 minutes to drive to work and 17 minutes to drive home from work. If Amanda got home from work at 7:47 PM, what time did she leave her house to go to work that day? A) 10:17AM B)10:30AM C)10:43AM D)10:47AM E) Answer not given
3	A large family orders 2 chicken baskets, 1 cheese burger, 3 pretzels with cheese, 1 32 oz soda, 3 frozen lemonades, 1 burrito and 7 jolly ranchers. They pay with a hundred dollar bill. What is their change? A) $35.25 B) $35.75 C) $64.25 D) $65.75 E) Answer not given
4	The concession stand takes in a total of $1,500 on a busy day. They sold a total of 350 ice cream cones of which 57 were vanilla cones, 211 were swirl cones (half chocolate - half vanilla) and the remaining cones were chocolate. About what percentage of the total day's income came from the chocolate part of the cones? Assume that the chocolate in the swirl cone is worth half the price of the cone. A)10% B) 15% C) 20% D) 25% E) 30%

Amanda is the shift leader at a concession stand at her local pool over the summer. Her concession stand is open to the public for 8 hours a day, 7 days a week. Here is a list of all the items and the prices.

Hot dog	$2.00	Slushies	$2.00
Hamburger	$3.00	Bottled Drinks	$2.00
Cheese Burger	$3.50	Energy Drinks	$2.50
Burrito	$1.50	16 oz Soda	$1.00
Kids Meal	$3.00	32 oz Soda	$2.00
Pretzel w/cheese	$2.50	Frozen Lemonade	$3.00
Pizza	$2.50	Candy	$1.00
Fries	$2.00	Chips	$1.00
Chicken Basket	$5.00	Ice Cream Cone	$1.50
Ranch Sauce	$0.50	Jolly Ranchers	$0.25

5	Little kids love Jolly Ranchers but rarely pay with quarters. How many different combinations of coins can little kids use if they pay the exact price for one jolly rancher? A) 10 B) 12 C) 13 D) 14 E) Answer not given
6	The frozen lemonade machine holds 3 gallons of lemonade. The lemonade is served in 14 fluid ounce cups. How many cups of lemonade can the concession stand sell when the machine is full? One gallon equals 128 fluid ounces. A) 13 cups B) 21 cups C) 25 cups D) 27 cups E) Answer not given
7	Amanda gets paid $10.00 an hour. However, the state takes away 10% of each paycheck for taxes. Amanda normally works 74.25 hours every 2 weeks and she works for 10 weeks. How much money will Amanda make this summer after taxes and rounded to the nearest whole dollar? A) $1,856 B) $3,341 C) $3,712 D) $6,683 E) Answer not given B)
8	A box of 36 pretzels costs $50.00. What is the total profit made from selling 4 boxes of pretzels? Assume the cheese has no cost to the concession stand. A) $103.68 B)$200.00 C)$259.20 D)$160.00 E) Answer not given
9	There are 12 different types of one dollar candy available at the concession stand. Grace has $3.00 she can spend on one dollar candy. How many different combinations of one dollar candy can she buy if she gets all different candy and doesn't necessarily have to spend all her money? A) 6 B) 298 C) 220 D) 66 E) Answer not given

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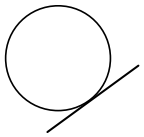
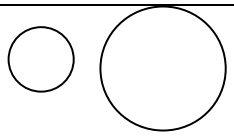
Team Contest

1	The term "degrees of frost" refers to the number of degrees below freezing that a temperature is. The freezing point is 32 degrees F. When the temperature is negative 14 degrees F, how many degrees of frost are there?
2	Max is playing at the beach with 3 cubical boxes, each a different size. The red box is 4 inches on an edge, the blue box is 3 inches on an edge, and the yellow box is 10 inches on an edge. Max fills the red box with sand three times and dumps it all in the yellow box. Now, what is the largest number of blue boxes full of sand he could empty completely into the yellow box?
3	Sixty-four unit cubes are formed into a cube, and then the outside is painted red. If one unit cube is chosen at random and is rolled, what is the probability that the top face is unpainted?
4	How many times will the digit 4 appear in a list of the first 72 even counting numbers?
5	Karen has a total of 17 bills in standard U.S. currency, of at least 3 different denominations (values). She has no $2 bills and no bills worth $100 or more. What is the positive difference between the maximum and minimum number of dollars Karen could have?
6	As a fraction, what is the largest possible value of $\frac{a/b}{c}$, where a, b, and c are chosen from among the first five natural numbers and no number is used more than once?
7	 A line is said to be tangent to a circle if it touches the circle at a single point, as in the figure at left. How many distinct lines can be drawn that are tangent to <u>both</u> circles in the figure at right? 
8	A 6-inch by 8-inch rectangular piece of paper is cut into 4 separate rectangles of equal area, such that the side lengths of the smaller rectangles are whole numbers. Let P equal the sum of the perimeters, in inches, of the four smaller rectangles. How many different values for P are possible?
9	Diana graduated from high school in June 2004, at the end of 12th grade, having spent exactly one school year in each grade. Diana started kindergarten in September of what year?
10	Mandi had a piece of string 58 cm long. When she cut the string into 2 pieces, one piece was 20 cm longer than the other piece. How long (in cm) was the longer piece?

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Relay Contest

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!*

	Practice Relay	Answer
Person 1	Evaluate: 1 + 2 + 3.	6
Person 2	Find the area in square units of a square with sides of length TNYWG.	36
Person 3	What is the mean of TNYWG and 24?	30
Person 4	Divide TNYWG by the number of faces on a cube.	5
	Relay #1	Answer
Person 1	Evaluate the expression $2x + 7$ if $x = 2$.	11
Person 2	A bicyclist travels around a square of side length TNYWG miles, then travels in a straight line for (TNYWG x 2) miles, and finally travels around a track shaped like a regular pentagon of side length 3 miles. What is the total distance, in miles, traveled by this cyclist?	81
Person 3	How many degrees is the complement of an angle measuring TNYWG°?	9
Person 4	If $3^{(x+2)} = 9^2$, find the product of x and TNYWG.	18
	Relay #2	Answer
Person 1	What is the sum of the first 4 odd numbers?	16
Person 2	Add the sum of the first positive 7 even numbers to TNYWG.	72
Person 3	Let D be the number of diagonals that a regular hexagon has. Find the value of TNYWG divided by D.	8
Person 4	The circumference, in units, of a circle is 40π. Find the area of the circle, in square units, and divide the area by (TNYWG x π).	50

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Final Score:
KEY

School Name_____Team #_____

Proctor Name_____Room #_____ Division: ____

Mental Math Contest

MENTAL MATH - 30 seconds per question

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 change or cross out answers once you have written an answer down. If there are eraser marks, write-overs, 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. You may continue to work on a problem while the next question is being read. The value of each question is a one or zero. Each student may answer only four questions, and then another member of your team will come up, until each team member has had a turn. If your team has fewer than 4 members, missing team members will receive a zero.*

PERSON 1 NAME:		**1 or 0**
1.1	If today is Friday, what day was it 45 days ago?	Tuesday
1.2	Cedric scores a goal 60% of the time. If he takes 20 shots, how many goals can he expect to make?	12 [goals]
1.3	Solve for x: 5 times x equals 75	[x =] 15
1.4	What is the third angle measure, in degrees, of a triangle with angles measuring 72 degrees and 28 degrees?	80 [°]
PERSON 2 NAME:		
2.1	What is the sum of 23, 15, and 26?	64
2.2	How many composite numbers are between 20 and 30?	7
2.3	Is the product of 12 and 23 even or odd?	even
2.4	Two sides of parallelogram are 5 inches and 7 inches, respectively. What is the perimeter, in inches, of the parallelogram?	24 [in]
PERSON 3 NAME:		
3.1	Evaluate: 5 factorial	120
3.2	What is the area of a circle with a diameter of 12 pi?	36 π^3
3.3	How many cents are 5 dimes, 3 nickels, and 2 pennies?	67 [cents]
3.4	A triangle has an area of 30 square feet and a base of 12 feet, what is the height, in feet?	5 [ft]
PERSON 4 NAME:		
4.1	Solve for y: y plus 10 equals 8	[y =] -2
4.2	True or False: 57 is prime	False
4.3	A rectangle's length is twice the width. If the length is 7, what is the perimeter?	21 [un]
4.4	What is the supplement in degrees of a 42 degree angle?	138 [°]

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Division 1

COLLEGE KNOWLEDGE BOWL ROUND #1

#	Problem	Answer
1	What is the product of one-fourth and the sum of one-half and one-third?	5/24
2	Seven and seventeen are the first two prime numbers containing the digit seven. Find the sum of the third and fourth prime numbers each containing the digit seven.	84
3	What is the probability of flipping three coins and getting two heads?	3/8
4	Evaluate: Two plus five minus three times two plus eight divided by four.	3
5	What is thirty-five squared minus thirty-three squared?	136
6	How many ways can you arrange the letters in the word "PASSPORT?"	10,080 [ways]
7	What is the sum of the exponents in the prime factorization of twenty-four?	4
	Extra Problem – Only if Needed	
8	If thirty-five plus x equals fifty-three, then what is 2x?	36

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Division 1

COLLEGE KNOWLEDGE BOWL ROUND #2

#	Problem	Answer
1	What is the sum of the first fifteen positive counting numbers?	120
2	If the area, in square units, of a rectangle is forty with sides of length eight and x, then what is x, in units?	5 [units]
3	What is the reciprocal of the sum of the reciprocals of three and four?	12/7
4	A drippy faucet drips one drop of water every second. How many drops of water will have dripped from the drippy faucet in one hour?	3600 [drops]
5	What is the probability of obtaining a red ace from a standard fifty-two card deck?	1/26
6	How many different ways can a prankster arrange the lights in a three-color traffic light?	6 [ways]
7	What is the sum of the first ten positive even numbers?	110
	Extra Problem – Only if Needed	
8	What is the smallest number that is a multiple of both seven and three?	21

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Division 1

COLLEGE KNOWLEDGE BOWL ROUND #3

#	Problem	Answer
1	I want to create the largest field possible for my bunnies using one hundred feet of fencing. What would the largest area be, in feet squared, if I was successful?	$2500/\pi$
2	A pyramid of cans is constructed such that each level decreases by one can as the pyramid rises. For example, if the ground level consists of three cans, then the next level up would have two cans followed by a last level having one can. If I have sixty-six cans, then how many levels are in the pyramid of cans?	11 [levels]
3	Given the equation two "x" plus 3 "y" equals 10, what is the value of "x" if "y" equals 3?	[x=] 1/2
4	If the length of cube A's sides in units are twice as big as the length of cube B's sides, then cube A's volume in cubic units is how many times larger than cube B's volume in cubic units?	8 [times]
5	How many ways can you draw a heart and then a spade from a standard deck of fifty-two cards?	169 [ways]
6	Evaluate: Three plus three times three minus three divided by three.	11
7	If thirty is less than x, and x is less than forty, then what is x given that x is divisible by three and thirteen.	39
	Extra Problem – Only if Needed	
8	What is the surface area, in square units, of a cube of side length three units?	54 [un^2]

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Division 2

COLLEGE KNOWLEDGE BOWL ROUND #1

#	Problem	Answer
1	What is the area in square units of a rectangle made of two right triangles with legs of length four and five?	20 [un^2]
2	Evaluate: One plus five times three minus four divided by two.	14
3	The product of two consecutive whole numbers is 9900. What is the sum of these two numbers?	199
4	How many two-digit integers are there?	180 [numbers]
5	What is the largest number that divides into both fifty-four and forty-five?	9
6	Find the volume, in cubic units, of a prism with sides of length three and one-tenth, three and nine-tenths, and two. Express answer as a decimal.	24.18 [un^3]
7	What is the sum of one to the zero power and one to the three-hundredth power?	2
	Extra Problem – Only if Needed	
8	If the probability of getting two heads when I flip two coins is N percent, what is the value of N?	25

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Division 2

COLLEGE KNOWLEDGE BOWL ROUND #2

#	Problem	Answer
1	At a local print shop, each square inch of photo costs the buyer twenty-five cents. If I want to print out a four-inch by six-inch photo, how much, in dollars, will I have to pay for this print?	6 [dollars]
2	What is the sum of the first seven odd numbers?	49
3	If the probability of finding a sea shell on the stormy seashores is five-sevenths, then what is the probability of not finding a sea shell on the stormy seashores?	2/7
4	If figure zero has 5 squares, figure 1 has 9 squares, figure 2 has 13 squares and figure 3 has 17 squares, how many squares would figure 100 have if the growth rate is the same between consecutive figures?	405 [squares]
5	What is the area, in square units, of the figure created by placing four identical squares of side length five around a fifth identical square without overlapping any of the squares?	125 [un^2]
6	Tim can knit three full sized sweaters in one week. Unfortunately, starting the second week, his cat Berty likes to rip them up at a rate one sweater a week. How many weeks will it take for Tim to have nine complete knitted sweaters?	4 [weeks]
7	What is the sum of the digits in the number: seven thousand four hundred thirty five?	19
	Extra Problem – Only if Needed	
8	What is the volume, in cubic units, of a prism with sides of length one-half, two-thirds, and three-fourths?	1/4 [un^3]

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Division 2

COLLEGE KNOWLEDGE BOWL ROUND #3

#	Problem	Answer
1	In Mazama, there is a hotel that is obsessed with the number two. There are two buildings, each with two floors. Each floor has two rooms, each with two beds. And each bed has two pillows with two pieces of chocolate on each pillow. How many total pieces of chocolate are provided by this hotel?	64 [pieces]
2	How many ways can I draw a heart from a standard fifty-two card deck and roll an even on a six-sided die?	39 [ways]
3	If I can squeeze out three pies from one five-ounce bag of flour, then how many pies can I make from three ten-ounce bags of flour?	18 [pies]
4	How many factors does the number twenty have?	6 [factors]
5	A positive counting number is deficient if the sum of the factors of the number, excluding the number itself, is smaller than the original number. What is the smallest positive deficient counting number?	2
6	A triangle is drawn inside of a square of side length eight with all three points at three of the corners of the square. What is the height in units of this triangle?	8 [units]
7	How many positive prime numbers are divisible by thirteen?	1
	Extra Problem – Only if Needed	
8	My tie dye shirt is twenty square feet in area and has three colors: blue, purple, and green. If blue covers half the shirt and green covers a quarter of the shirt, then what percentage of the shirt is purple?	25 [percent]

"Math is Cool" Championships – 2008-09

6th Grade – February 6, 2009

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	99002		
2	4		
3	100 [cm]		
4	268.83		
5	65.94		
6	5		
7	yes		
8	22/9		
9	40,320		
10	12 [ways]		
11	60		
12	CAB		
13	People		
14	4.75 [hrs]		
15	3/20		
16	3 [mph]		
17	3:5		
18	7.29×10^{-5}		
19	21/4		
20	-4		

	Answer	1 or 0	1 or 0
21	16 [cups]		
22	David		
23	[$] 16.05		
24	6:58 AM		
25	15		
26	41		
27	2/5		
28	30 [mph]		
29	$(4/3)\pi^4$ [un^3]		
30	45 [°]		
31	90 [°] clockwise		
32	[$] 21.00		
33	A		
34	7 [21-petaled daisies]		
35	42 [tubes]		
36	101000_2		
37	45/2		
38	.1323		
39	$\frac{2hp}{h+p}$		
40	[$] 32		

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School Name_____Team #_____

Proctor Name_____Room #_____Division: _____

Final Score:
KEY

First Score

(out of 18)

Team Multiple Choice Contest – Score Sheet

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.

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	A		
3	E		
4	C		
5	C		
6	D		
7	B		
8	D		
9	B		

"Math is Cool" Championships – 2008-09

6th Grade – February 6, 2009

School Name_____Team #_____

Proctor Name_____Room #_____Div: _____

Final Score:
KEY

First Score

(out of 20)

Team Contest – Score Sheet

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. Each problem is scored as a 2 or 0.

DO NOT WRITE IN SHADED REGIONS

	Answer	2 or 0	2 or 0
1	46 [degrees]		
2	29 [boxes]		
3	3/4		
4	23 [times]		
5	[$] 750		
6	5/2		
7	4 [lines]		
8	3 [values]		
9	1991		
10	39 [cm]		

"Math is Cool" Championships -- 2008-09

KEY

6th Grade – February 6, 2009

School:_____Team #_____

Proctor: _____ Room #_____Div _____

PRACTICE RELAY

Answer for person # 1	Answer for person # 2	Answer for person # 3	Answer for person # 4
6	**36**	**30**	**5**
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
11	**81**	**9**	**18**
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
16	**72**	**8**	**50**
1 or 0	1 or 0	1 or 0	2 or 0