6th Grade - May 16, 2009 Individual Contest

GENERAL INSTRUCTIONS applying to all tests:

- Good sportsmanship is expected throughout the competition by <u>all</u> 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 O.

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.

"Math is Cool" Masters - 2008-09 6th Grade - May 16, 2009 Individual Contest

Record all answers on the colored cover sheet.

1	On a digital clock showing only the hour and the minute, what is the sum of the digits showing at 11
T	minutes before noon?
2	What value of x makes the following equation true? $12 + 3 + 8 = 1 - 6 + x$
3	Emma has seven quarters, three pennies, seventeen nickels, and thirteen dimes. How many cents
5	does she have? (Note: Answer in <u>cents</u> , not dollars.)
4	Barry weighs twice as much as Larry. The average weight of Larry and his 5-kilogram cat Harry is 10 kilograms. How many kilograms does Barry weigh?
Б	Only giraffes and ostriches are feeding on a savanna. If there are 30 legs and 8 heads, how many
S	giraffes are on the savanna?
6	Each of 79 boxes has 79 cookies in it. How many cookies are there in all the boxes?
7	Evaluate 1.23 + 0.69 – 0.04 , and give your answer as a decimal.
8	Milly gets paid 25 cents for every newspaper she delivers. How much money, in <u>dollars</u> , will she get paid for delivering 42 newspapers?
9	Find the value of $18 + 18 + 18 + 18 + 19 + 19 + 19 + 18 + 18$
10	Jin's number is an integer greater than -4 and less than 10. What is the probability that Jin's number is even?
11	What month will it be 1000 months from May? Give the name of the month, not a number.
12	The minute hand of a clock has traveled 70% of the way around the dial from 12 o'clock noon. How many degrees has the hand traveled since noon?
13	Evaluate: $(5^2 - 36)^2$
14	Which is bigger, 5/7 or 9/13?
15	What is the sum of the first 10 composite numbers?
16	What is the median of the following set of 6 values? 18, 23.5, -9, 1600%, 47/2, 4π
17	When my number is divided by 7, the remainder is 3. When my number is divided by 5, the
	remainder is 4. Find the largest possible value for my number less than 100.
18	many ounces does the sponge weigh when dry?
19	What is the degree measure of the smaller angle between the hour hand and the minute hand of a clock at 8:30 AM?
20	Let $A = 104 - 98$, and $B = 2A \div 12$, and $C = 17 - (2B + A)$. What is $\left(\frac{A+B}{C}\right)$?
21	Find the sum of the next two numbers in the following sequence: -6, -3, 2, 9, 18,

22	 Two counting numbers, each a multiple of 3, are multiplied together. Give the letters of all of the following statements that must be true of the product. (If none of the statements must be true, answer "none".) A) The product is even. B) The product is odd. C) The product is a multiple of 3. D) The product is a multiple of 6. F) The product is a multiple of 9.
23	In an arithmetic sequence or addition pattern, you add the same amount to each term to get the next term. The first term of a certain arithmetic sequence is 8 and the third term is 19. What is the seventh term of this sequence?
24	Simplify, and express your answer in scientific notation: $\frac{(3.6 \times 10^8)(3 \times 10^{-4})}{(0.04 \times 10^{-3})}$
25	Jack and Jill are driving their racecars toward each other from the two ends of a straight road. Jack is driving at 120 miles per hour (mph), and Jill is driving at 100 mph. They meet after 15 minutes. How many miles away from each other were they at the start?
26	Sam is now three times as old as Alan. In ten years, Sam will be twice as old as Alan. What is the sum in years of their ages now?
27	Charlie eats 2/5 of a pie. Then Danny eats 3/4 of the remaining pie. What fraction of the pie is left?
28	Biff is riding his bike from his house to Eho's house to study math. Biff has ridden 8 miles plus two-thirds of the total distance, and still has 5 miles to go. How many miles is it from Biff's house to Eho's house?
29	Alice and Bertie are skipping rocks across a pond. Alice's rock bounces every 6 inches and Bertie's rock bounces every 8 inches. The pond is 25 feet wide and both rocks make it across, starting and ending at the same time and place. How many times will the 2 rocks be touching the water at the same time?
30	Helen only likes numbers that are multiples of 13, and Ellen only likes numbers whose units digit (ones place digit) is 1. What is the third smallest positive number that Helen and Ellen both like?

	Challenge Questions					
31	Randy and Alex are racing bikes around a circular track 800 meters long. If Randy bikes one and one-fourth times as fast as Alex, but Alex has a 500 meter head start, how many laps will it take for Randy to catch up with Alex? Assume that Randy bikes at a rate of 8 meters per second, and that Randy and Alex start at the same time and bike in the same direction. If your answer is not a whole number, give it as a decimal.					
32	A fast clock is set correctly at 12:00 noon, but it gains 4 minutes an hour. What will be the correct time when the fast clock next shows 12:00 midnight?					
33	If a rectangle has a perimeter of 30 inches and the length is 3 inches more than twice the width, what is the area of the rectangle, in square inches?					
34	Originally, Rosa had only red marbles and Billy had only blue marbles. First, Rosa gave half her marbles to Billy. Then Billy gave half his blue marbles to Rosa. Then Rosa gave half her blue marbles to Billy. Finally, Billy gave half his blue marbles to Rosa. Now Billy has 11 marbles (5 red and 6 blue). How many marbles does Rosa have now?					
35	Find the sum of the largest prime factor of 2008, the largest prime factor of 2009, and the largest prime factor of 2010.					

36	Before it performs calculations, my Enlarging Calculator automatically adds 77 to every even number I enter and triples every odd number I enter. It calculates correctly, using the enlarged							
	numbers, then correctly displays the results of its calculations. I enter a 2-digit counting number,							
	then "+" then a second 2-digit counting number. The calculator displays the sum "146". What is							
	the largest possible number I could have entered?							
27	Freddy takes one ball at random from a bag with 4 blue, 7 red, and 3 green balls, and keeps it.							
31	Freddy can tell that this ball is either red or green, but he can't tell which because he is colorblind.							
	Find the probability that the next ball Freddy takes from the bag at random will be red.							
20	A triangle has sides of 13, 14, and 15 units. What is the number of units in the radius of a circle							
38	inscribed in this triangle?							
39	A cube three inches on an edge is made from white unit cubes, each one inch on an edge. I want to paint as many of the unit faces blue as possible, but no two blue unit faces can share a side. It's OK for blue unit faces to touch diagonally, however. (See the diagrams for examples.) Find the largest number of unit faces of this cube that I can paint blue.							
4∩	Anna has four M&Ms (two red, one yellow, and one blue), which are identical except for color. In							
	how many distinct (different) orders can Anna eat her M&Ms if each mouthful is either a single							
	M&M or two M&Ms?							

6th Grade - May 16, 2009 Team Multiple Choice Contest

METAL ARTS SCULPTURE WORKSHOP

Alex, Helen, Miya, and Randy are attending the Metal Arts Sculpture Workshop. All the materials they have to work with are from the following supply list.

SUPPLY LIST

Shape	Size	Material	Package sizes available
cube	1-inch edge length	aluminum	cubical box (n layers with n by n per layer; n = 3-10, inclusive)
sphere	1-inch diameter	steel	cubical box (n layers with n by n per layer; n = 3-10, inclusive)
rod	0.5-inch diameter	brass	4-inch lengths (1 per package)
rod	0.5-inch diameter	copper	7-inch lengths (1 per package)
wire	20-gauge	silver	pkg of 18 pieces (1 of each length from 1-18 inches, inclusive)
wire	15-gauge	gold	pkg of 15 pieces (1 of each length from 1-15 inches, inclusive)

Note: Both rods and wires are right circular cylinders.

1	Alex glues t	wo aluminum cut	es together fo	ce-to-face, with	the faces lined up exactly	. What is the	
T	total surface area of this shape, in square inches?						
	A) 2	B) 10	C) 12	D) 6	E) Answer not given.		
2	How many m	ore aluminum cu	bes are in the	largest available	box than in the smallest av	vailable box?	
2	A) 7	B) 91	C) 973	D) 997	E) Answer not given.		
2	Randy make	s a sculpture in ·	the shape of a	square pyramid w	vith 49 steel spheres in the	e bottom layer	
3	and 1 sphere	e in the top laye	, such that ead	ch layer is a squa	re array of spheres and ea	, ch sphere	
	above the b	ottom layer rest	s on 4 spheres	below it. Randy	buys one box of spheres, t	he smallest	
	possible box	, that will give h	im enough to co	, mplete his desia	n. How many spheres will h	ne have left	
	over?		J J		, , , , ,		
	A) 15	B) 76	C) 14	D) 203	E) Answer not given.		
Δ	Miva buvs o	ne box each of c	ll available pac	kage sizes of ste	el spheres. What is the to	otal number of	
4	cubic inches	in the volume o	f all the sphere	s she bought? (I	Note: The volume of a sphe	ere is given by	
		$4\pi n^3$	· ··· ··· · · · · · · · · · · · · · ·	j	·····	j · · · · ·	
	the formula $\frac{4\pi r}{2}$, where $r =$ radius of the sphere.)						
		3		1500			
	A) $\frac{12064\pi}{12064\pi}$	B) <u>497π</u>	C) $\frac{3025\pi}{2}$	D) $\frac{1508\pi}{1}$	E) Answer not given.		
	3	3	6	´ 3	, ,		
5	Alex buys some brass rods and some copper rods with a total length of 34 inches. Brass rods cos						
5	\$2 each and	l copper rods co	st \$4 each. Th	e total cost of th	hese rods was \$18. How m	nany rods in all	
	did he buy?						
	A) 8	B) 7	C) 6	D) 5	E) Answer not given.		
6	When Helen buys a package of silver wire, she discovers that it has two pieces of 5-inch length and						
0	is missing one of the other lengths. The total length of the wire in this package is 159 inches.						
	Which piece	e of wire is missi	ng from Helen's	s package?			
	A) 12-inch	B) not enough	information to	tell C) 7-inch	D) 17-inch E) Answe	er not given.	

METAL ARTS SCULPTURE WORKSHOP

Alex, Helen, Miya, and Randy are attending the Metal Arts Sculpture Workshop. All the materials they have to work with are from the following supply list.

Shape	Size	Material	Package sizes available
cube	1-inch edge length	aluminum	cubical box (n layers with n by n per layer; n = 3-10, inclusive)
sphere	1-inch diameter	steel	cubical box (n layers with n by n per layer; n = 3-10, inclusive)
rod	0.5-inch diameter	brass	4-inch lengths (1 per package)
rod	0.5-inch diameter	copper	7-inch lengths (1 per package)
wire	20-gauge	silver	pkg of 18 pieces (1 of each length from 1-18 inches, inclusive)
wire	15-gauge	gold	pkg of 15 pieces (1 of each length from 1-15 inches, inclusive)

SUPPLY LIST

Note: Both rods and wires are right circular cylinders.

7	Helen plans to use her (defective) package of silver wire (from problem #6) to make a mobile, joining 18 pieces end-to-end to make 6 separate triangles. She wants at least one right triangle, one							
/								
	equilateral triangle, and one triangle that is isosceles but not equilateral. The sides of each triangle							
	will have inte	eger lengths, and	each side is mo	de from a single	e piece of wire. Helen can cut the wire			
	to get a leng	th she needs, bu	t when she cuts	a piece of wire	into two pieces, one of the pieces will be			
	waste (not u	sed). What is th	e minimum leng	th of waste wire	e Helen could have?			
	A) 1 inch	B) 2 inches	C) 3 inches	D) 4 inches	E) Answer not given.			
Q	Miya buys a	Miya buys a package of gold wire, but finds that it is missing two pieces (with no duplicates or						
0	extras). The	e total length of	the wire in this	package is 8 fe	et, 8 inches. How many different			
	packages wo	uld fit this descr	ription?					
	A) 7 B) 8 C) 14 D) 15 E) Answer not given.							
0	Miya gets a new package of gold wire with all pieces correct. She forms each piece that is an <u>even</u> number of inches long into a circle by joining the ends without overlap. How many of these circles							
フ								
	will have an a	area greater thai	n 10 square inch	es?				
	A) 2	B) 3	C) 4	D) 5	E) Answer not given.			

6th Grade - May 16, 2009

Team Contest

1	What point on a number line is halfway between 14 and 38?
2	What is the sum of all possible values of the following expression, when two of the @ symbols are replaced by addition symbols, and the other two @ symbols are replaced by multiplication symbols? 1 @ 2 @ 3 @ 4 @ 5
3	Josh worked for 4 hours. He spent 1/3 of his earnings from this job to buy candy, then put 1/4 of what remained in his savings account. He then had \$16.50 of his earnings left. How much money (in dollars) did Josh earn per hour for this job?
4	Patricia is adding 7s and 17s together. She gets a sum of exactly 100. How many numbers did Patricia add together to get this sum?
5	A cubical box of edge length 4 inches is exactly filled with water. When this water is poured into another cubical box of edge length 8 inches, how many inches deep is the water in the larger box?
6	For every 2 blueberries Cathy eats, Denise eats 3. For every 4 blueberries Denise eats, Ella eats 5. What is the ratio of the number of blueberries Cathy eats to the number of blueberries Ella eats? Express this ratio as a reduced fraction.
7	In Gridtown, the streets are all 2-way and run either north-south or east-west, one block apart in each case. From his house, Colin went searching for a coffee shop. He drove along the streets 18 blocks north, then 7 blocks east, then 4 blocks south, then 11 blocks west. There he stopped for a cup of coffee. He then drove back home along the streets by the shortest route. How many blocks shorter was Colin's return trip than his trip from home to the coffee shop?
8	Freddie, George, Henry, and Isaac each had the same amount of money, all in dimes. Freddie gave half of his dimes to George, keeping the other half. George took half the dimes he got from Freddie and gave them to Henry, keeping the other half. Henry took half the dimes he got from George and gave them to Isaac, keeping the other half. Isaac now had \$1.50 more than Freddie. How many dimes did Freddie have originally?
9	There is a glitch in the display of my calculator. When I enter a number with three or more digits, it randomly selects two of those digits and adds 2 to each of them before displaying the entry. (For example, if I enter "123", it will display either 145, 343, or 325.) When I entered the same 3-digit counting number twice, the display showed 647 the first time and 629 the second time. What number did I enter?
10	In a particular year, March had 5 Fridays. If this was not a Leap Year, January 1st could only have been on what day or days of the week? Give the names of all possible days of the week.

"Math is Cool" Masters – 2008–09 6th Grade – May 16, 2009 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!

	Relay #1	Answer
Person 1	A rectangle has a perimeter of 28 units. What is the largest possible number of square units in the area of this rectangle?	49 [sq un]
Person 2	Find the quotient when the sum of 176 and 167 is divided by TNYWG.	7
Person 3	Paul rolls two dice. How many ways can he get a sum of TNYWG?	6 [ways]
Person 4	A right triangle with an area of 24 square units has one leg of length TNYWG units. What is the number of units in the perimeter of this trianale?	24 [units]
	Relay #2	Answer
Person 1	A baker is carrying 10 dozen bagels to his display case, but he trips and drops one-sixth of them. He then sells $1\frac{2}{3}$ dozen bagels. How many bagels does he have left?	80 [bagels]
Person 2	There are cows and chickens in a field, with 3 times as many chickens as cows. If the cows and chickens have TNYWG legs altogether, how many cows are there in the field?	8 [cows]
Person 3	What is the total number of square cm in the surface area of a regular tetrahedron (a triangular pyramid) with edge length TNYWG cm?	64√3 [sq cm]
Person 4	TNYWG should be in the form $A\sqrt{B}$. What is the smallest positive integer with $B + \sqrt[3]{A}$ positive integer factors?	64

6th Grade - May 16, 2009

School Name_____Team #_____



Proctor Name_____

_____Room #_____ Division: ____

Mental Math Contest

MENTAL MATH - 30 seconds per question

PERSO	ON 1 NAME:	1 or 0
1.1	The circumference of a circle is thirty pi inches. What is the number of	225π or
	square inches in the area of the circle?	225pi [in ²]
1.2	What is three-eighths plus two-thirds? Express your answer as a reduced	25/24
	fraction.	
1.3	When counting backwards from 100 by 19s, the first number I say is "100".	62
	What is the next even number I will say?	
1.4	How many distinguishable ways can I arrange the letters in the word	360 [ways]
	"Masters", spelled M-A-S-T-E-R-S, if the T must come first?"	
PERSO	ON 2 NAME:	1
2.1	How many meters are in two point three one kilometers?	2310
2.2	What number must I subtract from the product of 4 and 17 to get an answer	47
	equal to the sum of 4 and 17?	
2.3	One hundred thirty-two is what <u>fraction</u> of fifty-five?	12/5
2.4	The average of five numbers is five. If four of the numbers are ones, what	21
	is the fifth number?	
PERSO	DN 3 NAME:	
3.1	If fifty-three plus X is equal to seventy, then what is seventy plus X?	87
3.2	How many seconds have elapsed from 8:19 AM to 9:24 AM the same day?	3900 [sec]
33	What is the height, in centimeters, of a cylinder with radius three	2/3 [cm]
0.0	centimeters and volume six pi cubic centimeters?	
3.4	What is the remainder when six-hundred sixty-two is divided by 7?	4
PERSO	ON 4 NAME:	
4.1	Evaluate: twenty point four plus thirty point five plus ten point two. If your	61.1
	answer is not a whole number, give it as a decimal.	
4.2	What is the perimeter in inches of a rectangle with an area of 28 square	22 [in]
	inches and one side of length four inches?	
4.3	A positive integer has three digits, which could be the same or different. If	900
	the sum of these digits is less than ten, what is the largest this integer could	
	be?	
4.4	Two angles are complementary. The ratio of the two angles is one to four.	72 [°]
	What is the degree measure of the larger angle?	

May 16, 2009

6th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #1

#	Problem	Answer
1	When the fraction twenty-seven over thirty-six is	7
	simplified, what is the sum of the reduced numerator	
	and denominator?	
2	At the yearly Math Retreat, one thousand five hundred	24 [test
	sixty questions were written. Each test writer wrote an	writers]
	average of sixty-five questions. How many test writers	
	were present?	
3	Two positive integers have a least common multiple of	9
	forty-five. If one of the numbers is fifteen, what is	
	the smallest the other number could be?	
4	The area of a certain square, measured in square inches,	8 [inches]
	is half the perimeter of the square, measured in inches.	
	What is the number of inches in the perimeter of this	
	square?	
5	When Eho drove his car as part of his job, his expenses	250 [miles]
	were paid at a rate of forty-five cents per mile. For the	
	month of June he got a check for one hundred twelve	
	dollars and fifty cents to pay his car mileage expenses.	
	In June, how many miles did Eho drive as part of his	
	job?	
6	How many integers from thirty-three to seventy-seven	14 [integers]
	have at least one digit that is a four?	
7	A chicken farm ships twenty-five dozen eggs at a time	10 [days]
	to town. The chickens lay thirty eggs a day. How many	
	days will it take to get enough eggs for a shipment?	
	Extra Problem – Only if Needed	
8	Find the units digit of the product of the first seventeen primes.	0

May 16, 2009

6th Grade - Division 1 & 2

COLLEGE KNOWLEDGE BOWL ROUND #2

#	Problem	Answer
1	How many ways can three married couples sit in a row	48 [ways]
	of six seats if each man must sit next to his wife?	
2	A box is a rectangular prism. The volume of the box is	3 [inches]
	twenty-four cubic inches. The lengths of two of the	
	edges are two inches and four inches. What is the	
	length, in inches, of the third edge?	
3	Three hundred percent of twenty percent of my	60 [%]
	savings is equal to what percent of my savings?	
4	Wheat increased in price from \$3 a bushel to \$17 a	140
	bushel. How many fewer bushels of wheat are you able	[bushels]
	to buy for \$510 at the \$17 per bushel price than at	
	the original price?	
5	What is the perimeter in meters of a decagon with	5 [meters]
	sides of length fifty <u>centimeters</u> ? If your answer is	
	not a whole number of meters, give it as a decimal.	
6	The product of five counting numbers is thirty-two.	36
	What is the largest possible sum of the five counting	
	numbers?	
7	I drove my new car thirty miles in twenty-five minutes.	3 [hours]
	At this rate, how many hours will it take to drive two	
	hundred sixteen miles? If your answer is not a whole	
	number of hours, give it as a decimal.	
	Extra Problem - Only if Needed	
		00000
8	A pailnarome reads the same backwards as forwards. What is the	89998
	har yest even a digit integer that is a painal offer	

"Math is Cool" Masters - 2008-09 May 16, 2009 6th Grade - Division 1 & 2 COLLEGE KNOWLEDGE BOWL ROUND #3

#	Problem	Answer
1	Terry multiplied 3 different prime numbers together. How	8 [integers]
	many different positive integers are factors of this	
	product?	
2	Kai can paint a rectangular wall thirty feet by twenty feet	6 [gallons]
	with one gallon of paint. How many gallons of paint will he	
	need to paint a rectangular wall sixty feet by sixty feet?	
3	Find the sum of two-four base five and three-three base	one one two
	five and give your answer in base five.	[base 5]
4	Tom had seven coins in his pocket that were either nickels	40 [cents]
	or dimes. The coins had a total value of fifty-five cents. If	
	Tom spent all his nickels, how many cents would he have	
	left?	
5	When counting by sevens starting with seven, how many	13
	two-digit numbers would you say?	[numbers]
6	What is the maximum number of triangles that can be	8 [triangles]
	drawn in a convex quadrilateral by only connecting vertices?	
7	All the aces have been removed from a standard deck of	1/8
	cards. What is the probability of drawing a club from the	
	remaining deck of cards, and then rolling an even number on	
	a standard cubical die? Give your answer as a fraction.	
	Extra Problem – Only if Needed	
0	A rectangle has a perimeter of eighty inches. The length is three	300 [square
Ō	times the width. Find the area of the rectangle, in square inches.	inches]

6th Grade - May 16, 2009

School Name_____

_____Team #_____

First Score

Final Score:

KEY

Proctor Name______Room #_____

STUDENT NAME

Division:

Individual Contest - Score Sheet DO NOT WRITE IN SHADED REGIONS

	Answer	1 or 0	1 or 0		Answer	1 or 0	1 or 0
1	15			21	71		
2	28			22	C, E [either order]		
3	393 [¢][NOT \$3.93]			23	41		
4	30 [kilograms]			24	2.7 × 10 ⁹		
5	7 [giraffes]			25	55 [miles]		
6	6241 [cookies]			26	40 [years]		
7	1.88			27	3/20		
8	[\$] 10.50			28	39 [miles]		
9	183			29	12 [times]		
10	6/13			30	351		
11	Sept. or September			31	3.125 [laps]		
12	252 [°]			32	11:15 PM		
13	121			33	44 [in ²]		
14	5/7			34	15 [marbles]		
15	112			35	359		
16	17			36	36		
17	94			37	63/130		
18	5 [ounces]			38	4 [units]		
19	75 [°]			39	22 [faces]		
20	7/9			40	37 [orders]		
					·		

"Math is Cool" Masters - 2008-09 6th Grade - May 16, 2009	Final Score: KEY
School NameTeam #	First Score
Proctor NameRoom #Division:	(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.

	Answer	-1, 0 or 2	-1, 0 or 2
1	В		
2	С		
3	В		
4	D		
5	В		
6	D		
7	С		
8	A		
9	A		

DO NOT WRITE IN SHADED REGIONS

"Math is Cool" Masters - 2008-09 6th Grade - May 16, 2009	Final Score: KEY
School NameTeam #	First Score
Proctor NameDiv:Room #Div:	(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	26		
2	179		
3	[\$]8.25		
4	10 [numbers]		
5	1 [inch]		
6	8/15		
7	22 [blocks]		
8	24 [dimes]		
9	427		
10	Sun, Mon, Tues [any order]		

"Math is Cool" N	asters 2008-09
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6th Grade - May 16, 2009

School:_____Team #_____

Proctor: _____ Room #_____ Div ____

RELAY # 1

Answer for person	Answer for person	Answer for person	Answer for person
# 1	# 2	# 3	# 4
49	7	6	24
[sq un]		[ways]	[units]
1 or 0	1 or 0	1 or 0	2 or 0

RELAY # 2

Answer for person	Answer for person	Answer for person	Answer for person
# 1	# 2	# 3	# 4
80	8	64√3	64
[bagels]	[cows]	[sq cm]	
1 or 0	1 or 0	1 or 0	2 or 0