



Knights of Pi Math Tournament – December 14th,
2013

Mental Math 5th/6th

Person 1

1	Evaluate: 5 plus 6 plus 7 times 2
2	How many ways can you create a pizza with 2 crusts and 4 toppings to choose from, given that each pizza contains exactly one type of crust and one type of topping?
3	Mary decides to visit the zoo. She decides to buy peanuts for the elephants. If one pound of peanuts costs \$2.40, and Mary wants 3 pounds of peanuts, how much money will she spend?
4	If $x=4$ and $y = (x \text{ squared divided by } 2,)$ what does y equal?
5	If a boop equals 2 moops, and 3 moops equals 4 shoops, how many shoops do I have if I have 3 boops?

Person 2

1	The area of a square is 16 inches squared. What is the new area, in inches squared, if each side is increased by 50%?
2	In how many distinct ways can the letters in the word H-E-L-L-O be arranged?
3	What is the hypotenuse of a right triangle with legs 5 inches and 12 inches?
4	Find the mean of the following set: {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}.
5	What is 13 squared?

Person 3

1	30 is twenty five percent of what number?
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2	Your friend is 3 foot 6. How tall is your friend in inches?
3	What is the probability that you roll 2 dice and get two threes?
4	What is one-ninth plus one-third?
5	An isosceles triangle has a unique angle of 30 degrees. What is the measurement of one of the equal angles?

Person 4

1	What time is 14 minutes before 1:08 PM?
2	What is 9 times 12 divided by 3?
3	Each day, Steven eats a prime number of candy bars. If Steven is dieting and must not eat more than 10 candy bars per day, what is the maximum number of candy bars he can eat in a day?
4	What is the difference between 1283 and 1750?
5	What is the area, in square cm, of a trapezoid with a height of 6 cm and base lengths in centimeters representing the two smallest prime numbers, respectively?