



Knights of Pi Math Tournament – Jan. 7, 2017

Mental Math 5th/6th

Person 1

1	What is the sum of $1 + 2 + 6 + 8 + 12 + 13$?
2	What is the sum of the first 6 even integers?
3	Evaluate 5 factorial.
4	If $x = 4$, evaluate $x * x/2$
5	If a triangle has side lengths 11 and 21, what is the sum of the highest and lowest possible value of the third side?

Person 2

1	If 2 bananas cost the same as 1 apple, and 3 apples cost the same as 1 coconut, how many bananas would a coconut cost?
2	Evaluate $1252 - 924$
3	What is the volume of a rectangular prism with sides 4, 7, and 8?
4	Evaluate $3 * 4 + 5 * 6$
5	What is the volume of a cube with side length 7?

Person 3

1	Evaluate two to the sixth power.
2	If Bob has 6 white marbles and 16 black marbles in a bag, what's the chance of Bob picking out a white marble without looking into the bag? Simplify your answer.
3	How many ways are there to arrange the letter in the word hijack, H-I-J-A-C-K?
4	Two cars initially start 1000 meters apart. They start driving towards each other, one car at 20m/s and the other at 80m/s. How long, in seconds, will it take for the two cars

	to collide?
5	What is the sum of $4 + 2 + 15 + 7$?

Person 4

1	What is the sum of 1234 and 2356?
2	Albert can drink 5 cans of coke in an hour. Bob can drink 6 cans of coke per hour. If both Albert and Bob do not stop drinking, how many cans of coke can they consume in 4 hours?
3	What is the surface area of a cube with side length 3?
4	Evaluate three to the fourth power.
5	How many ways are there to arrange the letters in the word fries, F-R-I-E-S?