



Knights of Pi Math Tournament – March 17,
2018

Block Test 5th/6th

1	Find the sum of $1 + 2 + \dots + 50$.
2	Calculate 2 times 6 times 9.
3	What is the probability of flipping 1 head and 4 tails if you flip a coin 5 times?
4	What is the smallest square number greater than 1200?
5	In how many distinct ways can you arrange the letters in the word PIZZA?
6	What is the difference between the smallest 3-digit number divisible by 13 and the smallest 4-digit number divisible by 17?
7	In a farm, there are horses and ducks. A horse has 4 legs and a duck has 2 legs. There are a total of 18 heads and 64 legs. How many horses are there?
8	A square and a rectangle have the same perimeter of 24. If the length and width of the rectangle differ by 2, which has a bigger area?
9	What is 50% of 60% of 90?
10	How many 3-digit integers are divisible by both 15 and 17?
11	How many minutes are in 4 and a quarter days?
12	How many prime numbers are less than or equal to 101?
13	I have a magic number X. If I divide this by 2 I get a remainder of 1. If I divide this by 3 I get a remainder of 2. If I divide this by 4 I get a remainder of 3. If I divide this by 5 I get a remainder of 3. If I divide this by 6 I get a remainder of 5. What is the smallest possible positive value of X?
14	What is the largest 3-digit palindrome?
15	What is the sum of the mean and mode of the numbers 2, 3, 1, 4, 0, 2?