## Magic Math Contest

1.	1	What is $\frac{1}{2} \div \frac{1}{2}$ ?
2.	400	What is $99 + 99 + 101 + 101?$
3.	0	How many multiples of 5 have a units digit of 4?
4.	700	What is $25 \times 4 \times 7?$
5.	2000	What is the value of $5 \times 2 \times 8 \times 25$ ?
6.	99	Ryan picks a random number. His number is 3 times 4 less than 37. What was Ryan's number.
7.	33	What is the sum $5.5 + 6.5 + 7.3 + 10.5 + 3.2$ ?
8.	12	In a school, 68 students are doing basketball or soccer after school. If 31 students are playing basketball and 49 people are playing soccer, how many people are playing both?
9.	66	What is $11 \times 23 - 11 \times 17?$
10.	90	What is the sum of the first 5 multiples of 6?
11.	9	How many prime number are between 1 and 25 not including 1 and 25? (A prime number is a number that is divisible only by 1 and itself).
12.	1849	What year in the 19th century (1801 - 1900) was a perfect square? (A perfect square is a number that is the multiplication of a number 2 times. For example $25 = 5 \times 5$ is a perfect square).
13.	360	At the restaurant, Frosty's, there are a lot of deserts. There are 5 types of cakes, 4 different ice cream flavors, 3 different chocolates, and 2 different flavors of pie. You are only aloud to take one of each and may take none of anything. For example you can take one of each or no desert at all. How many ways are there to get desert?
- 4	10	

**14**. <u>10</u> What is the value of  $(\frac{1}{5} \times \frac{2}{3}) \times 75$ ?

- **15**. <u>2</u> Tom picks 2 vertices of a regular pentagon. How many different ways are there to do this if configurations that are rotations of other configurations are the same?
- **16**. <u>36</u> How many numbers are in the sequence 11, 12, 13, 14 ... 45, 46 Such that all the terms are consecutive?
- 17. <u>5</u> If 5 workers take 7 days to build a house. How long will it take for 7 workers to build the house?
- 18. <u>94</u> I have a triangle with angles 60 degrees and 26 degrees. What is the angle measure of the third angle? Note: the figure is not to scale.



- **19**. <u>6</u> What is the  $510^{th}$  term in the sequence 12345678912345... that repeats the string of numbers 123456789 forever?
- **20**. <u>11</u> If I can only add 7s or 3s, what is the largest number I cannot make. For example I can make 13 by adding one 7 and two 3s?