



# Mental Math 5th/6th

## Person 1

1	What is the maximum number of intersection points of 3 distinct lines?
2	2 is ten percent of what number?
3	What is the supplement, in degrees, of an angle of 60 degrees?
4	How many sides does a hexagon have?
5	What is the smallest prime number greater than 40?

## Person 2

1	In which quadrant does the point 3 comma -12 lie?
2	What is the positive difference between 2014 and the square of 6?
3	How many positive integer factors does 10 have?
4	What is the largest integer that does not exceed its reciprocal?
5	What is the circumference of a circle with an area of $25\pi$ ?

## Person 3

1	A liter of water weighs X pounds, and an empty bucket weighs Y pounds. In terms of X and Y, how many liters of water can the bucket hold if it weighs 5 pounds when full?
2	How many space diagonals are in a cube?
3	What is the sum of the positive integer factors of 8?
4	The length of a diagonal of a certain square is the square root of 2. What is its area?
5	How many prime numbers are less than 12?

## Person 4

1	How many diagonals does a pentagon have?
2	What is the smallest positive integer that has 3 positive integer factors?
3	The denominator of a certain fraction is double the numerator. What is this fraction?
4	How many digits does 2 to the power of 10 have?
5	If February tenth in the year 2017 is a Friday, what day is March eleventh in the same year?