DO NOT FLIP OPEN THIS TEST UNTIL YOU ARE INSTRUCTED TO BEGIN

ONLY ANSWERS WRITTEN ON THE ANSWER SHEET WILL BE SCORED

1	What number is 7 times the sum of 39 and 75?
2	When the secret number is multiplied by 5 and this result is decreased by 27, the final result is 53. What is the secret number?
3	What digit is in the hundreds place of 4605.1797?
4	What is the perimeter, in feet, of an equilateral triangle with sides measuring 3 ft?
5	Evaluate: $-7 + 4(-6 - 7)$
6	When one card is drawn from a standard 52-card deck, what is the probability that it is a red face card or the 9 of spades? Jacks, Queens, and Kings are considered face cards.
7	What is the 20th term of the Fibonacci Sequence, where each term is the sum of the two preceding terms, and beginning 1, 1, 2, 3, 5, 8, …?
8	How many edges does a tetrahedron have?
9	How many days are in 4 non-leap years?
10	What is the name for a triangle with a largest angle measuring 91 degrees?
11	Express 0.9856 in scientific notation.
12	What is the smallest number greater than 100 that leaves a remainder of 3 when divided by 7?
13	What are the coordinates, in the form (x, y), of the y-intercept of the line $6x + 3y = 15$?
14	What is the units (ones) digit when 44703, 47940, 56391, and 68501 are added together?
15	What is the sum of the 19 smallest counting numbers?
16	What is the length, in feet, of a leg of a right triangle with one angle measuring 45 degrees and a hypotenuse measuring 4 feet?
17	Fai is 5 times as old as Sebastian. 3 years ago, Sebastian was 2 years old. How old was Fai then?
18	A bag contains 9 yellow marbles and 9 green marbles. When two marbles are drawn, what is the probability that exactly 0 of them are green?
19	Evaluate in terms of $i = \sqrt{-1}$: $(-1 + 8i)(1 - 3i)$
20	What is the sum of the measures, in degrees, of the interior angles of a

	decagon?
21	The probability that it rains tomorrow is $\frac{1}{7}$, and the probability that I play video games tomorrow is $\frac{1}{8}$. If these two events are independent, what is the probability that it does NOT rain, but I DO play video games?
22	What are the coordinates, in the form (x, y), of the leftmost x-intercept of the parabola with equation $y = x^2 - 18x - 33$?
23	What is the range of the data set {5, 5, 0, 5}?
24	What value of c satisfies $2c + 41 = 7c - 24$?
25	An equilateral triangle with an area of 5 m^2 is similar to another triangle, each of whose sides is 7 times as long as those of the original triangle. What is the area, in square meters, of the larger triangle?
26	What is 25% of 132?
27	What is the perimeter, in inches, of an equilateral triangle inscribed in a circle with a circumference of 20π in?
28	I order the $20 value meal at my favorite restaurant, where sales tax is 10%. Because their service is so good, I always tip 20% of the bill with tax. How many dollars rounded to the nearest hundredth (cent) do I spend in total?
29	A cube of white plastic is painted blue on all sides, then cut into 729 congruent cubes. How many of these cubes are blue on exactly 2 faces?
30	Simplify by combining like terms: $9f + f^2 - 6 + 9f + 3f^2 + 8 - 7f^2$