



Individual Test 5th/6th

1	Fred has stolen 30 toilet seats, while George's thievery has earned him 17 toilet seats. Between them, how many toilet seats do they have?
2	I used to have \$35 in quarters, but then my sister took 35 quarters. How much money do I have now?
3	What is the divisor in the expression $6 \div 3 = 2$?
4	Austin eats a dozen boxes of donuts per day. If each box contains a half-dozen donuts, how many donuts does he eat each day?
5	Evaluate: $279 + 923$
6	Evaluate: $3 - 3 * 3 + 3 \div 3$
7	What is 25% of 40% of $\frac{5}{3}$?
8	Find the value of x if $10 - 4x = 5x - 3$
9	Mr. Peanut has 4 monocles, 2 top hats, and 6 canes. In how many ways can he pick one monocle, one top hat, and one cane to wear?
10	Natasha buys a coat for \$50. If the sales tax is 8.6%, how much does she pay?
11	Through which quadrant does the line $3x + y = 9$ NOT pass?
12	Jason drives at 360 kilometers per hour. After driving for 2 hours and 45 minutes, how many kilometers has he driven?
13	If it is 11:32 a.m., what time will it be 4 hours and 53 minutes from now?
14	What is the name of the regular polygon that has 5 diagonals?
15	Allison can write a ten page paper in three hours. If one page contains 600 words, what is her average typing speed, to the nearest tenth, in words per minute?
16	George is chugging apple juice from an initially full can with a height of 10 cm and a base diameter of 6 cm. He can drink at a rate of 18 cubic centimeters per second. How many seconds does it take for him to chug the apple juice?
17	Triangle ABC , with sides of length 5, 5, and 8, is similar to triangle DEF , whose longest side has length 16. What is the perimeter of triangle DEF ?
18	Andrew is making deep-fried meatballs. Inside every third meatball he puts a piece of cheese. If he makes 500 meatballs, how many pieces of cheese did he put in the meatballs?
19	Mr. James is ordering pizza. If there are 3 sizes (small, medium, and large) and he can choose any 2 of 5 different toppings, how many distinct pizzas could he order?

20	A dodecahedron has 12 pentagonal faces. How many vertices does it have?
21	Define $a^{\circ}b$ by $a^{\circ}b = ab(b - a)$. What is the value of $2^{\circ}(3^{\circ}2)$?
22	What is the supplement, in degrees, of half of a right angle?
23	A square with vertices $(0, 0)$, $(0, 4)$, $(4, 4)$, and $(4, 0)$ is rotated 180 degrees clockwise about the origin. What is the sum of the coordinates of the new square's vertices?
24	What is the greatest common factor of 48, 60, and 84?
25	If I flip a fair coin 5 times, what is the probability that I obtain at least 3 heads?
26	What is the maximum number of regions into which 3 planes can divide 3-D space?
27	Irving and Emily each bake a cake using the same recipe. Irving uses two cups of flour and a half cup of sugar. Emily wants a bigger cake, so she uses proportional amounts of each ingredient. If Emily uses three cups of flour, how many cups of sugar did she use?
28	There are 4 bumps in a jump. There are 3 jumps in a lump. There are 2 bumps in a hump. How many humps are in 6 lumps?
29	It is a dark morning and Brandon cannot see his socks, but he knows he has 4 red socks, 3 green socks, 14 purple socks, 1 pink fuzzy sock, and 5 black socks in his drawer. How many socks must he draw to ensure that he has a matching pair?
30	My birthday was 164 days ago. Today is Saturday. On what day of the week was my birthday?
31	Ray is reading a book. The product of the page numbers of the two pages he is looking at is 420. What is the sum of the two page numbers?
32	What is the volume of a cone with a base radius of 6 and a height of 5? Express your answer in terms of π .
33	Sasha's teacher gave a number and told her to multiply it by 3 and add 5. Instead, Sasha added 5 and multiplied by 3, getting 87. What was the answer she was supposed to get?
34	6 farmers can milk 6 cows in 6 days. How long would it take 10 farmers to milk 15 cows?
35	Two high schools each send delegations of 8 students to a meeting. If each student shakes hands with every student from the other high school but none from his or her own, how many unique handshakes take place?
36	What are the coordinates of the vertex of the equation $y = 3x^2 + 12x - 9$? Express your answer as an ordered, (x, y) pair.
37	The first three terms of a geometric sequence are 36, 54, and 81. What is the next term?
38	What is the sum of the next two terms in the following sequence? 3, 6, 12, 24, 48, __, __
39	How many distinct arrangements can be made from the letters in "MUGGLE"?
40	Geoffrey is making a tour of the planets in the solar system. If he must begin his tour at Earth, how many routes could he take to visit each of the 8 planets exactly once?