

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If the line $2x - y + k = 0$ is a diameter of the circle $x^2 + y^2 + 6x - 6y + 5 = 0$ then k is equal to	A. 12 B. 9 C. 6 D. 3
2	$f(x) = x $ is a/an	A. Injective function B. Bijective function C. Surjective function D. Implicit function
3	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
4	A die is rolled. What is the probability that the dots on the top are greater than 4?	A. $\frac{1}{4}$ B. $\frac{1}{2}$ C. $\frac{1}{3}$ D. $\frac{1}{33}$
5	The multiplicative inverse of 1 is	A. 1 B. -1 C. 0 D. Does not exist
6	The vector $i = [1, 0]$ is called unit vector along:	A. x-axis B. y - axis C. z - axis D. Both a and y-axis
7	If $f(x) = x $, then (0,0) is the	A. Critical point B. Inflection point C. Stationary point D. None of these
8	If the terminal rays of an angle falls on any axis then the angle is called	A. Allied angle B. Acute angle C. Standard position D. Quadrantal angle
9	If $a > 0, b > 0, c > 0$, then the roots of the equation $ax^2 + bx + c = 0$ are	A. Real and negative B. Non-real with negative real parts C. Real and positive D. Nothing can be said
10	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
11	Question Image <input style="width: 100%; height: 15px;" type="text"/>	A. direction ratios B. direction cosines C. direction angles D. none of these
12	$(ABC)'$ =	A. CBA' B. CBA C. C'B'A D. C'B'A'
13	If $f(\alpha) = b^2$ and $g(c) = d$ where $c = b^2$ then $(g \circ f)(a)$ is	A. α B. c C. b D. d
14	A polynomial of arbitrary degree	A. $f(x) = 0$ B. $f(x) = x$ C. $f(x) = a$ D. $f(x) = ax + b, a \neq 0$
15	If $-1 < x < 0$, which of the following statements must be true?	A. $x^2 < x^3$ B. $x^3 < x^2$ C. $x^2 < x^3$ D. $x^2 < x^3$ & $x^2 < x$
		A. [1, 1, 1.5]

16	If $a = [1, 4, 3]$ and $B = [2, -1, 5]$ then the mid point M of AB is:	B. $[2, 2, 1.5]$ C. $[1.5, 1.5, 4]$ D. None of these
17	The set of rational numbers is subset of	A. The set of natural numbers B. The set of real numbers C. The set of integers D. The set of whole numbers
18	Question Image <input type="text"/>	
19	$A = B$ if	D. A is equivalent to B
20	Which of the following represents a vector	D. (x, y)