Mathematics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	The line joining (1, 3) to (a, b) has unit gradient then	A. a-b = -2 B. a+b = 0 C. a-b + 5 D. 2a+3b=1
2	If -1 < x < 0, which of the following statements must be true?	A. x < x²< x³ B. x < x³< x² C. x²< x³< x D. x²< x < x³
3	Question Image	
4	If x < y, 2x = A, and 2y =B, then	A. A = B B. A < B C. A < x D. B < y
5	If c is a constant number and if f is the function defined by the equation f(x) = c for all values of x, then f is differentiable at every x and f is defined the equation f(x) = _____	A. f B. 1 C. C D. 0
6	Question Image	
7	The circle $(x-2)^2+ (y+3)^2= 4$ is not concentric with the circle	A. (x-2)²+ (y+3)²= 9 B. (x+2)²+ (y-3)²= 4 C. (x-2)²+ (y+3)²= 8 D. (x-2)²+ (y+3)²= 5
8	Question Image	D. None of these
9	Question Image	D. None of these
10	Question Image	
11	Question Image	
12	If $f_1(x)$ and $f_2(x)$ are any two anti derivatives of a function F (x), then the value of $f_1(x) - f_2(x)$ =	A. A variable B. A constant C. undefined D. infinity
13	The curves $y = x^2$, y = x intersect at	A. (0,0) , (1, 1) B. (2, 4) D. (0,3), (-1, 1)
14	If n is a positive integer, then 3+6+9+ ----------+3n =	
15	Multiplicative inverse of "1" is	A. 0 B. <u>+</u> 1 C. 1 D. {0, 1}
16	Question Image	A. 15 B. 60 C. 90 D. 20
17	Question Image	
18	Question Image	A. 1 B. 2 C. 3 D. 4
19	Question Image	

19	Question Image	
20	Two dice are rolled. The number of possible outcome in which at least one die shows 2 is?	A. 5 B. 12 C. 11 D. 7