

STA-301 Quiz OnlineTest

Sr	Questions	Answers Choice
1	Sigma notation is represent by	A. M B. N C. "Σ"
2	$y=1/(1-x)$ if then	A. 1 B. -1 C. $1/(1-x)^2$
3	$h(x)=1/(x-2)(x-4)$ domain of the function is	A. $(-\infty, 2) \cup (4, +\infty)$ B. $(-\infty, 2) \cup (4, +\infty)$ C. All are incorrect
4	set{...-4,-3 ,-2,-1,0,1,2,3,4} is known as the set of	A. natural number B. Integer C. whole number
5	$\log_b 1/c = ?$	A. $\log_b b$ B. $1 - \log_b c$ C. $-\log_b c$ D. $1 + \log_b c$
6	$\log_b a c = ?$	A. $\log_b a + \log_b c$ B. $\log_b a + \log_b b$ C. None of these
7	Let $y=(x^3+2x)^{37}$ which of the following is correct?	A. $dy/dx=37(x^3+2x)^{36}$ B. $dy/dx=111x(x^3+2x)^{36}$ C. $dy/dx=(111x^2+74)(x^3+2x)^{36}$
8	if $x^2+y^2=9$ then $dy/dx=?$	A. x/y B. $-x/y$ C. $-y/x$
9	if $xy=4$ then $dy/dx=?$	A. 0 B. $-1/x^2$ C. $-4/x^2$
10	If $y=1/(1-x)$ the $dy/dx=?$	A. -1 B. 1 C. $1/(1-x)^2$
11	According to Power -Rule of differentiation ,if $f(x) = x^n$ where n is a real number,then $d/dx[x^n]$	A. x^{n-1} B. nx^{n-1} C. $(n-1)x^{n-1}$
12	no of x and y are intercept for the equation $y=1/x$	A. Two x intercepts B. Two y intercepts C. No x and y intercept correct D. None of these
13	Function f is differentiable function if it is differentiable on the interval	A. $(-\infty, \infty)$ B. (a, ∞)

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A. negative integer
B. (0, ∞)
C. (0, ∞)
D. None of these

14 graph $x = y^2$ is symmetric about

- A. x axis
B. y axis
C. origin
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15 Center and radius of the circle is $(x+5)^2 + (y-3)^2 = 16$ is

- A. (-5,3),4
B. (5,-3),16
C. (5,-3),4
D. None of these
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16 Consider two function $f(x) = x^3$ and $g(x) = (x+9)$ then $f \circ g(x) =$

- A. $(x+9)^3$
B. $x+3$
C. $x+9$
-

17 Average velocity of a body is V_{ave}

- A. $d\frac{t}{t} - d\frac{o}{t}$
B. $t\frac{1}{t} - t\frac{o}{t}$
 $t\frac{o}{f(t)} - f(t\frac{o}{t})$
C. $f(t\frac{o}{t}) - f(t\frac{o}{t})$
 $t\frac{o}{t} - t\frac{o}{t}$
D. None of these
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18 $\log_b a^r = \underline{\hspace{2cm}} ?$

- A. $a \log b$
B. $r \log b$
C. $\log b/a$
 $\log b/a$
-

19 Let x_0 be the critical point of the function f , those critical points for which $f'(x_0) = 0$ are called _____ of

- A. Local points
B. End points
C. Stationary points
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20 What is the base of natural logarithm ?

- A. 2.71
B. 10
C. 5
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