

FA Part 2 Mathematics Chapter 2 Test Online

Sr	Questions	Answers Choice
1	If s is the distance traveled by a body at time t , the velocity is given by the expression:	
2	Question Image	
3	Question Image	A. $\operatorname{sech} x \tanh x$ B. $-\operatorname{sech}^2 x$ C. $-\operatorname{sech} x \tanh x$ D. $\operatorname{sech}^2 x$
4	The function $f(x) = 3x^2$ has minimum value at :	A. $x = 3$ B. $x = 2$ C. $x = 1$ D. $x = 0$
5	Question Image	A. $x = a$ B. $x = 2$ C. $x = 0$ D. None
6	Question Image	
7	Question Image	A. x with respect to y B. y with respect to y C. y with respect to x D. x with respect to x
8	If $y = f(u)$ and $u = F(x)$, then:	
9	Notation $Df(x)$ for derivative was used by:	A. Cauchy B. Newton C. Leibniz D. Lagrange
10	Question Image	A. $\sin x$ B. $-\cos x$ C. $-\sin x$ D. $\cos x$
11	Question Image	A. Lagrange B. Newtown C. Leibniz D. Cauchy
12	Question Image	A. $\sec x \tan x$ B. $-\sec^2 x$ C. $-\sec x \tan x$ D. $\sec^2 x$
13	Question Image	
14	Question Image	A. $\operatorname{sech} x \tanh x$ B. $-\operatorname{sech} x \tanh x$ C. $\operatorname{sech}^2 x$ D. $-\operatorname{sech}^2 x$
15	Question Image	
16	The small change in the value of $f(x)$, positive or negative is called the ----- of x .	A. Increment B. Differential C. Derivative D. none of these
17	Question Image	
18	Question Image	
19	Question Image	A. 0 B. 1 C. -1 D. 2
20	Question Image	A. $1(1-4)$ B. $2x-3$ C. $x-3$

		$\frac{d}{dx} x^3 = 3x^2$ D. $x^3 - 3x$
21	For a square of side x units, the rate of change of area with respect to the side is given by:	A. x B. x^2 C. 2x D. 2
22	Question Image	
23	Question Image	A. 5 sin x B. cosh (5x) C. 5 cosh (5x) D. -5 cosh (5x)
24	The instantaneous rate of change of y with respect to x is given by:	
25	Question Image	A. tan x B. cot x C. - tan x D. - cot x
26	Question Image	A. cosech x coth x B. $\frac{d}{dx} \text{cosech } x = -\text{cosech } x \coth x$ C. -cosech x coth x D. $\frac{d}{dx} \text{cosech } x = -\text{cosech } x \coth x$
27	Question Image	A. x = a B. for all x D. x = 0
28	Question Image	
29	If $f(x) = \cos x$ then $f'(0)$ is equal to:	A. 0 B. -1 C. 1
30	Question Image	
31	Question Image	A. sin x B. cos x C. -sin x D. -cos x
32	Question Image	
33	Question Image	A. 2cosh x B. 2sinh x C. 2sinh (2x) D. -2sinh (2x)
34	Sir Isaac Newton was a(an) ----- mathematician.	A. German B. French C. Swiss D. English
35	Question Image	A. sinh x B. cosh x C. -sinh x D. -cosh x
36	Question Image	
37	The derivative of x with respect to y is given by:	
38	Question Image	A. cosec x cot x B. $\frac{d}{dx} \text{cosec } x = -\text{cosec } x \cot x$ C. $\frac{d}{dx} \text{cosec } x = -\text{cosec } x \cot x$ D. cosec x cot x
39	The Maclaurin series expansion is valid only if it is:	A. Convergent B. Divergent C. Increasing D. Decreasing
40	Question Image	A. sec x tan x B. $\frac{d}{dx} \sec x = \sec x \tan x$ C. -sec x tan x D. $\frac{d}{dx} \sec x = \sec x \tan x$
41	Question Image	A. $\frac{d}{dx} \text{cosec } x = -\text{cosec } x \cot x$ B. $\frac{d}{dx} \text{cosec } x = -\text{cosec } x \cot x$ C. - cosec x cot x D. cosec x cot x
42	Question Image	

43	Question Image	A. c B. 0 C. 1 D. -c
44	Question Image	A. $\sinh x$ B. $\cosh x$ C. $-\sinh x$ D. $-\cosh x$
45	Question Image	A. $x = a$ B. $x = 2$ C. $x = 0$ D. None
46	Gottfried Wilhelm Leibniz was a (an) ----- mathematician:	A. German B. English C. Swiss D. French