

FA Part 2 Mathematics Chapter 3 Test Online

Sr	Questions	Answers Choice
1	If $y = x^2 + 1$ _____ x changes from 3 to 3.02 then $dy =$ _____	A. 0.1204 B. .12 C. .02 D. 1.2
2	The term dy (or df) = $f'(x) dx$ is called the _____ of the dependent variable y .	A. Differentiation B. Integration C. Differential D. None of these
3	If the lower limit is a constant and the upper limit is a variable, then the integral is a function of:	A. x B. y C. lower limit D. upper limit
4	Question Image	A. 36 B. 42 C. 48 D. 12
5	Question Image	
6	Question Image	A. $\ln \sec x + \tan x + c$ B. $\ln \cosec x - \cot x + c$ C. $\ln \sec x - \tan x + c$ D. $\ln \cosec x + \cot x + c$
7	The general solution of differential equation of order n contains n arbitrary constants, which can be determined by ----- initial value conditions.	A. 1 B. 0 C. 2 D. n
8	Area between x -axis and the curve:	A. 32 B. 16
9	Question Image	A. $\tan x + c$ B. $-\tan x + c$ C. $\sec x + c$ D. $-\sec x + c$
10	If the upper limit is a constant and the lower limit is a variable, then the integral is a function of:	A. x B. y C. lower limit D. upper limit
11	Question Image	A. $a \cosec(ax + b)$ B. $\cot(ax + b)$
12	Question Image	A. $\cosec x + c$ B. $-\cosec x + c$ C. $\cot x + c$ D. $-\cot x + c$
13	Question Image	A. $\tan x + c$ B. $-\tan x + c$ C. $\sec x \tan x + c$ D. $-\sec x \tan x + c$
14	Question Image	
15	Question Image	A. $\cot x$ B. $-\cot x$ C. $\cosec x \cot x$ D. $-\cosec x \cot x$
16	Question Image	A. Integration B. Integration w.r.t.x C. Differentiation D. Differentiation w.r.t.x
17	Question Image	A. integration by parts B. definite integral C. Differentiation D. None of these

18 An integral of $3x^2$ is:

A. x^3+c
B. 3
C. $6x$
D. x^2+c

19 Question Image

20 If the graph of f is entirely above the x -axis, then the definite integral is _____:

A. Positive
B. Positive or negative
C. Negative
D. Positive and negative
