

MTH-101 Final Term Exams Preparation Virtual University

Sr	Questions	Answers Choice
1	If there is some function F such that $d/dx[F(x)] = f(x)$ then antiderivatives of $f(x)$ are $F(x) + C$. What does C represent?	A. Polynomial B. Constant C. Dependent variable D. Independent variable
2	If there is some function F such that $d/dx[F(x)] = f(x)$ then any of the function of the form $F(x) + C$ is _____ of $f(x)$	A. Derivative B. Antiderivative C. Slope D. Maximum value
3	The mean value of theorem states that " Let function f can be differentiable on (a, b) and continuous on $[a, b]$ then there is no exist at least one point c in (a, b) where _____	A. $f'(c) = f(b) - f(a) / b - a$ B. $f(c) = f(b) - f(a) / b - a$ C. $f(c) = f(a) - f(b) / b - a$
4	If a function has an extreme value (either a maximum or a minimum) on an open interval (a, b) then the extreme value occurs at _____ of f	A. First point B. Mid point C. Critical Point D. End Point
5	$\log_b a =$ _____	A. $\log_{b _b a} + \log_{b _b c}$ B. $\log_{b _b a} - \log_{b _b c}$ C. $\log_{b _b a} / \log_{b _b c}$ D. $\log_{b _b a} * \log_{b _b c}$
6	Let $y = (x^3 + 2x)^{37}$ Let Which of the following is correct?	A. $dy/dx = (37)(x^{³ + 2x)^{³⁶}$ B. $dy/dx = (111x^{² + 2)^{³⁶}$ C. $dy/dx = (111x^{² + 74)^{³⁶}$ D. $ $
7	The $\tan(x)$ is discontinuous at the point where	A. $\cos(x) = 0$ B. $\sin(x) = 0$ C. $\tan(x) = 0$
8	Polynomials are always _____ function	A. Continuous B. Discontinuous C. Not Sure
9	The graph of the equation $y = x^2 - 4x + 5$ will represent	A. Parabola B. Straight Line C. Ellipse
10	Which operation can not be applied on the function?	A. Subtraction B. Cross Product C. Addition D. Composition