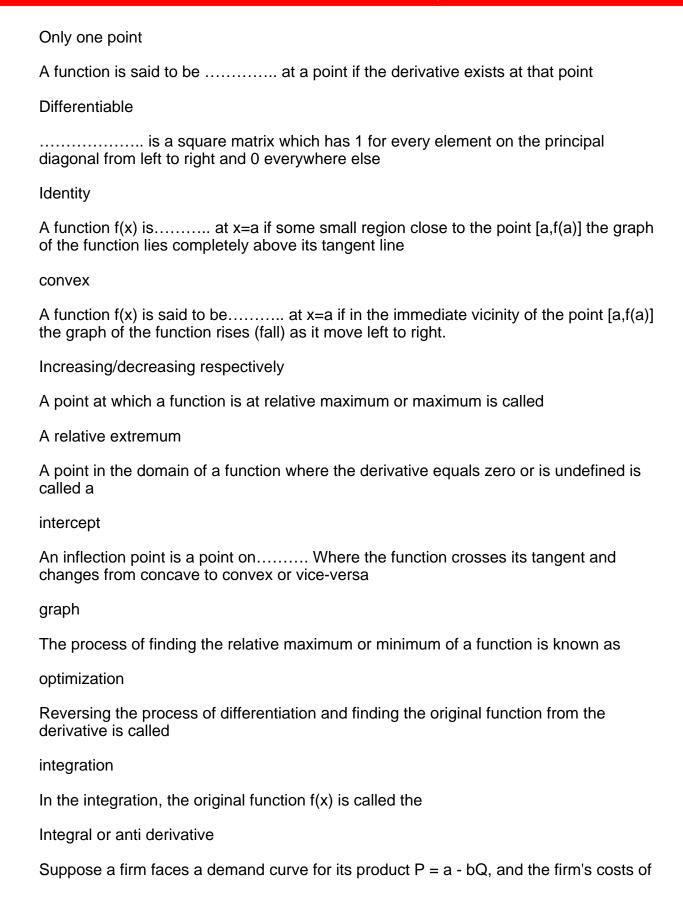


Use the rules of implicit differentiation to find dy/dx for the function y=f(x)=x4y6=89.

dy/dx= -2y/3x Given the total revenue function as TR=30Q-2Q2. The values of marginal revenue MR if Q=4 and Q=5 are and 10 respectively
14 Given the TR function as R=4000Q-33Q2 and the total cost as C=2Q3-3Q2+400Q+5000 assuming Q>0. What is the profit function (π) ?
-2Q3-30Q2+3600Q-5000 The integral of sum or difference of two or more function is the sum or difference of the individual integral. True or False?
True he production function q=AKαLβ is a typical production function
Cobb-Douglas When the second derivative of any function equals zero, the occurs
inflection point In matrix operation, any matrix of 2 by 3 order means
Two rows and three columns When the first derivative of an economic model is zero or undefined, the model is therefore
Critical The concept of Derivative is about
Rate of change Differentiation is a primitive function in calculus. True or False
FALSE The integral of sum or difference of two or more function is the sum or difference of the individual integral. True or False?
True A continuous function is one which has in its curve. It can be drawn without lifting the pencil from the paper.
No breaks
The process of finding the derivative of a function is known as
Differentiation
A tangent is a straight line that touches a curve at



production and marketing are C(Q) = cQ + d, where P is price, Q is quantity, and a, b, c, and d are positive constants. Find the second order condition (SOC) for maximum profit

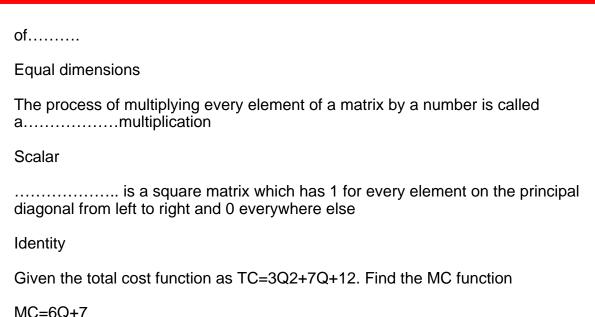
 $d2\Pi/dQ2 = -2b < 0$,

Suppose the firm faces a demand curve for its product P = 32 - 2Q, and the firm's costs of production and marketing are C(Q) = 2Q2. Find The price and quantity that maximize profit, and the corresponding value of profit.

Q=4, P=24 and Π = 64. respectively is a rectangular array of numbers or variables or parameters each of which has a carefully ordered place within the matrix matrix The numbers or parameters in the matrix are referred to as...... of the matrix elements The policy that deals with the use of government expenditure and tax to control economic performance is _____ Fiscal The numbers in in a horizontal and vertical line are called..... Rows and columns respectively The dimension of a matrix is defined by the number of...... Number of rows and columns In a matrix whose number of rows are equals to the number of columns s called..... Square matrix If a matrix is composed of single column such that its dimension is r*1 it is called a..... Column vector A matrix which converts the rows of A to columns and the columns of A to rows is called.....

Transpose of A, A'

Addition and subtraction of Two matrices A&B requires that, the two matrices are



Given the total cost function as TC=3Q2+7Q+12. Find the AC function

AC = TC/Q = 3Q + 7 + 12/Q

Given the total cost function as TC=3Q2+7Q+12. Find the value of MC, when Q= 3 and 5 respectively

25 & 37 respectively

Given the total cost function as TC=3Q2+7Q+12. Find the value of AC function when Q=3 and 5 respectively

20 & 24.4 respectively

Given that, C=200+0.9Yd, where Yd=Y-T, and T=300+0.2Y, use the derivative to find the value of marginal propensity to consume MPC

MPC = dc/dy = 0.72

Given the total revenue function as TR=32Q-Q2 find the critical value and maximum profit at the critical values respectively

16 & 256 respectively

Given the TR= 1400Q-6Q2 and TC=1500+80Q. test the first and second order condition for the profit function respectively.

 $\Pi' = -12Q + 1320 = 0$ and $\Pi'' = -12 < 0$ respectively

A monopolist faced with two distinct demand functions as Q1= 24-0.2P1 and Q2= 10-0. 05P2, where TC=35+40Q. What prices will the firm charge with discrimination?

P1=80 & P2=120 RESPECTIVELY

A monopolist faced with two distinct demand functions as Q1= 24-0.2P1 and Q2= 10-0. 05P2, where TC=35+40Q. What prices will the firm charge without discrimination? Note that without discrimination P1=P2

P=88