The expression for the horsepower of an engine is , where n is the number of cylinders and x is the bore of cylinders. Determine the power differential addec when four cylinder car has the cylinders rebored from 3.25cm to 3.265cm

0.156hp, 0.210, 0.319, 0.180

Find the derivative of arc csc(3x)

Compute the equation of the horizontal asymptote of the curve

Evaluate : when , given

Answer: 16

Which of the following is correct:

is an extreme value of if

if is an extreme value of , then

if , then is an extreme value of f(x)

An elliptical plot of garden has a semi-major axis of 6m and a semi-minor axis of 4.8m. If these are increased by 0.15 each, find the differential equations the increase in area of the garden in sq.m

If , then

1, vx, 0,

Answer: 2x^2

If the area of a circle is , compute the allowable error in the area of a circle if the allowable error in the radius is 0.02mm

Find the derivative of

2^(4x+2)ln2

find the derivative of h with respect to u if

Calculate the derivative of

if y^2=ax^2+bx+c, then d(y^3y\_z)/dx=?

y=a.x^2 find dy/dx

If temperature fieldin a body varies according to the equation T(x,y)=x^2+4xy then direction of fastest variation in temperature at a point is given by

The velocity of a body as a function of time is given as where t is in seconds, and i is in m/s. The acceleration in m/s^2 at t=6.0s

Find dy/dx for the following functions: