

W2-3-1 The total differential of a function with two variables 1

A function y with two variables x and z , i.e. $y = y(x, z)$ has been given. Give the total differential of this function. $dy = \dots$

The total differential is: $dy = \left(\frac{\partial y}{\partial x}\right)_z dx + \left(\frac{\partial y}{\partial z}\right)_x dz$.