## 2 - Partial Derivatives

## MATH 211

The pressure p (in Pa) of a gas as a function of its volume V and temperature T is given by p = nRT/V. Find the rate of change of p with respect to V, dp/dV, How did you treat T?

Now, find the rate of change of p with respect to T.

Find all second and mixed partial derivatives of the function.

$$z = \frac{x}{y} + e^x \sin y$$