

$f(x) = 3x_0^3 - 2x_0x_1^2 + 4x_1 - 8$  what are the partial derivatives of  $f(x)$  with respect to  $x_0$  and  $x_1$ .

$$f(x_0) = 3 * 3x_0^2 - 2x_1^2 + 0 - 0$$

$$f(x_0) = 9x_0^2 - 2x_1^2$$

$$f(x_1) = 0 - 2x_02x_1 + 4$$

$$f(x_1) = 4x_0x_1 + 4$$