

## Exercises 3 Solutions.

$$\underline{2.} \quad f = x^2y + \sin x + \exp(x+y)$$

$$f_x = 2xy + \cos x + \exp(x+y)$$

$$\underline{f_{xx} = 2y - \sin x + \exp(x+y)}$$

$$f_y = x^2 + \exp(x+y)$$

$$\underline{f_{yy} = \exp(x+y)}$$

$$\underline{f_{xy} = 2x + \exp(x+y)}$$

$$\underline{f_{yx} = 2x + \exp(x+y)}$$