Opgave 9.2.23

Find all second-order partial derivatives for the following.

$$f(x, y) = 4x^2y^2 - 16x^2 + 4y$$

— s. 530

Find f_x

$$f_x(x, y) = 8y^2x - 32x$$

Find f_y

$$f_y(x, y) = 8x^2y + 4$$

Find f_{xx}

$$f_{xx} = 8y^2 - 32$$

Find f_{yy}

$$f_{yy} = 8x^2$$

Find f_{xy}

$$f_{xy} = f_{yx} = 16xy$$