

$$9/ \quad f(x, y) = \frac{x^2 - y}{x} = \underbrace{(x^2 - y)}_u \cdot \underbrace{x^{-1}}_v$$

$$(u \cdot v)' = u'v + uv'$$

$$u = x^2 - y$$

$$u' = 2x$$

$$v = x^{-1}$$

$$v' = -x^{-2}$$

$$(x^2 - y) \cdot (-x^{-2}) + \frac{2x}{x}$$

$$- \frac{x^2 + y}{x^2} + 2$$

$$- 1 + \frac{y}{x^2} + 2$$

$$- \frac{x^2}{x^2} + \frac{y}{x^2} + \frac{2x^2}{x^2}$$

$$\frac{-x^2 + y + 2x^2}{x^2}$$

$$\frac{x^2}{x^2} + \frac{y}{x^2}$$

$$\underline{f_x = 1 + yx^{-2}}$$