

Bonus 3 - RESEM' Kombi

① a) $y' = e^x(x^3 - 3x + 1) + e^x(3x^2 - 3) = e^x(x^3 + 3x^2 - 3x - 2)$

b) $y' = \cos(x^2 + 1) \cdot 2x - \frac{1}{2\sqrt{x}}$

② a) $z'_x = 4xy^3 - 4y^2$

$$z'_y = 6x^2y^2 - 8xy$$

b) $z'_x = 5(x^2 - 3y)^4 \cdot 2x = 10x(x^2 - 3y)^4$

$$z'_y = 5(x^2 - 3y)^4 \cdot (-3) = -15(x^2 - 3y)^4$$