

10a

$$f: z = x^3 - 3x^4y + y^5$$

druhé parc. der. ?

$$z'_x = 3x^2 - 3y \cdot 4x^3 = \underline{\underline{3x^2 - 12x^3y}}$$

$$z'_y = \underline{\underline{-3x^4 + 5y^4}}$$

$$z''_{xx} = 6x - 12 \cdot 3x^2y = \underline{\underline{6x - 36x^2y}}$$

$$z''_{xy} = \underline{\underline{-12x^3}}$$

$$z''_{yx} = -3 \cdot 4x^3 = \underline{\underline{-12x^3}}$$

$$z''_{yy} = 5 \cdot 4y^3 = \underline{\underline{20y^3}}$$