No.

Date :

Tentukan $M(x,y)$ sedemikian sehingga PD berikut merupakan PD Eksak.

$M(x,y)\,dx + (2x^2y^3 + x^4y)\,dy = 0$!

jawab :

$$\frac{\partial M}{\partial y} = \frac{\partial N}{\partial x} = 4xy^3 + 4x^3y$$

$$\int \frac{\partial M}{\partial y}\,\partial y = \int 4xy^3 + 4x^3y\,\partial y$$

$$= 4 \cdot \frac{1}{4} \cdot xy^4 + 4 \cdot \frac{1}{2} x^3y^2 + C$$

$$= xy^4 + 2x^3y^2 + C$$

Jadi, fungsi $M(x,y) = xy^4 + 2x^3y^2$