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No. _____

Date . . .

Menentukan fungsi $M(x,y)$ ssh PD berikut merupakan PD Eksak
 $M(x,y)dx + (2x^2y^3 + x^4y)dy = 0$

$$\Rightarrow N(x,y)dy = (2x^2 + y^3 + x^4y)dy$$

$$\text{berlaku syarat } \frac{\partial M}{\partial y} = \frac{\partial N}{\partial x}$$

$$\frac{\partial N(x,y)}{\partial x} = 4xy^3 + 4x^3y$$

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

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

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

$$\text{Jadi, fungsi } M(x,y) = xy^4 + 2x^3y^2 + c$$