

$$\int \frac{1-2u}{2-u} = \int \frac{4-2u}{2-u} - \frac{3}{2-u} = \int 2 + \int \frac{3}{2+u} = 2u + 3 \log(u-2) = x + C$$

$$e^{2u} \cdot (u-2)^3 = c e^x$$

$$e^{2(x+y)} (x+y-2)^3 = c e^x$$

$$(6.) x^3(y' - x) = y^2$$

$$x^3 y' - x^4 = y^2$$

$y = z^m$ -nel lehet-e homogén feltevéssel
tenni?

$$y' = m z^{m-1}$$

$$m=2$$

$$x^3 \left(\left(\frac{y}{x} \right)' - 1 \right) = \frac{y^2}{x^4}$$

$$x^3 \frac{y'}{x} - x^4 = \frac{y^2}{x^4}$$

$$x^3 \frac{y'}{x} = \frac{y^2}{x^4} + x^4$$

$$z' = \frac{z^4 + x^4}{x^3 z} = \frac{\left(\frac{z}{x}\right)^4 + 1}{2\left(\frac{z}{x}\right)}$$

$$z = ux$$

$$z' = u'x + u$$

$$u'x + u = \frac{u^4 + 1}{2u}$$

$$u'x = \frac{u^4 + 1}{2u} - u = \frac{u^4 + 1 - 2u^2}{2u} = \frac{(u^2 - 1)^2}{2u}$$

$$\int \frac{2u}{(u^2 - 1)^2} du = \int \frac{1}{x} dx$$

$$\frac{f'}{f^2} - \frac{1}{(u^2 - 1)} = \log(x) + C \rightarrow e^{\frac{x^2}{x^2 - y}} = Cx$$

+ ellenőrizni a szabálytalan lépésekből szárm.
megoldást