

M351 Tutorial/Lab 1 (S. Zhang) .

1. Find the slope y' at point $(1, 2)$

$$4y' + xy^2 = 12x^2$$

Solution:

$$y' = \frac{12x^2 - xy^2}{4}$$

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yp:= (12*x^2 - x*y^2 )/4;
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subs({x=1,y=2},yp);
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evalf(%);
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Answer 2.

2. Find the slope y' at point $(-3, 2)$

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