Name: \_\_\_\_\_

1. This problem concerns the equation  $x^2 + xy + y^2 = 7$ 

(a) Find 
$$\frac{dy}{dx}$$
.

(b) Use your answer from part (a) to find the slope of the tangent to the graph of  $x^2 + xy + y^2 = 7$  at the point (2, -3).

Name: \_\_\_\_\_

1. This problem concerns the equation  $xy^3 = xy + 6$ 

(a) Find 
$$\frac{dy}{dx}$$
.

(b) Use your answer from part (a) to find the slope of the tangent to the graph of  $xy^3 = xy + 6$  at the point (1, 2).