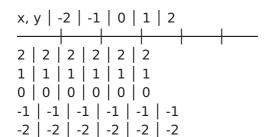
Ch 7.1.2

Complete the tables to find the value of dy/dx at the points (x, y). Then create a slope field and show the approximate solution passing through the given point.

1.
$$dy/dx = y$$
, (1, 1)



2.
$$dy/dx = x + y (1, 1)$$

3.
$$dy/dx = -x/y$$
, (0, 2)

2 | | 0.5 | 0 | -0.5 |

Solve the following differential equations: On the starred problem, take the derivative of the answer and show it gives the original DEQ.

1.
$$dy/dx = 2x / y => y dy = 2x dx$$

$$2*. dy/dx = y^2 => ?$$

3.
$$dy/dx = (x + \sin(x)) / 3y^2 => 3y^2 dy = x + \sin(x) dx$$

$$4*. dy/dx = 4y => ?$$

5.
$$dy/dx = ky => dy/y = k dx$$

$$6*. dy/dx = xy => dy/y = x dx$$

(I'm really not sure about these)