Weekly Assignment 6

1. Use implicit differentiation to find the derivative of the following:
	1. $\frac{d}{dx}(ln\left(x\right)$
	2. $\frac{d}{dx}(log\left(x\right))$
2. Find the derivatives of the following functions
	1. $f\left(x\right)=sin⁡(3x)e^{x^{3}}$
	2. $f\left(x\right)=ln(2x+3)\*2^{3x}$
	3. $f\left(x\right)=\frac{\sqrt{2x+1}}{cos⁡(2x)}$
3. Use implicit differentiation to find y’ for the following:
	1. $x^{2}y^{2}=x+2$
	2. $sin(xy)=x+y$

4. For each of the following graphs of *f*, draw the graph of *f’:*

a. 

b. 