

## Math 135, Calculus 1, Fall 2020

### Weekly Quiz 11-11

Show all work: clearly indicate your answer and the reasoning used to arrive at the answer. Unsupported answers may not receive full credit.

**Problem 1.** For the equation  $xy + 3x + 4y = -2$ , calculate the derivative  $\frac{dy}{dx}$  at the point  $(1, -1)$ .

**Problem 2.** Use logarithmic differentiation to compute  $f'(x)$  if  $f(x) = x^{8x}$ . You must show all work.