

Please show **all** your work! Answers without supporting work will not be given credit.  
Write answers in spaces provided.

Once you are done, scan or take a picture of this document and submit it via email to  
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Name: \_\_\_\_\_

1. Use implicit differentiation the following expressions.

(a) [1 pt]  $\frac{d}{dx}(xy)$

$$\frac{d}{dx}(xy) = \underline{\hspace{10cm}}$$

(b) [1 pt]  $\frac{d}{dx}\left(\frac{x}{y}\right)$

$$\frac{d}{dx}\left(\frac{x}{y}\right) = \underline{\hspace{10cm}}$$