

## MAT 136 (Calculus I), Quiz 6, Prof. Jim Swift

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

You may work on this in groups, but turn in your own quiz. (Being here gets 1 free point.)

1. (1 point) Find the derivative of

$$f(x) = \ln |x^2 - 3x + 1|$$

2. (3 points) (a) Find the local linearization of  $f(x) = \frac{1}{x}$  at 10.

(b) Use the answer to part (a) to get a decimal approximation to  $\frac{1}{11}$ , without a calculator and without doing long division.

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