

# Math 2143 - Brief Calculus with Applications

## Written Assignment 4 - Due 2018.07.01

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Directions: Please answer the following question in complete sentences. Be sure to label all geometric objects in any illustrations (if any). I will accept an answer in a scanned image format, as a pdf, or as a picture taken and sent from your awesome smart phone.

Question: Consider the function

$$f(x) = x^{2x-1}$$

Referring to problem 66 of Section 3.5 as a guide, compute  $df/dx$ . State the domain of the function, graph it, and then attempt to locate the minimum value with the aid of a calculator or computer algebra system such as *Mathematica* or *Wolfram Alpha*.