## Math 142 - Midterm 1 Suggested Study Problems

Here are problems that are similar to the ones you might see on the exam.

Logarithm Rules Cht. 5 review exercises # 3, 5, 7, 11 Make sure that you know the laws of logarithms.

**Derivatives** Cht. 5 review # 9, 43, 45, 59, 73 Pay attention to the chain rule, product rule and quotient rule in these problems.

Logarithmic Differentiation Cht. 5 review # 61

Integrals Cht. 5 review # 15, 17, 47, 79 When should you use u-substitution?

**Inverse Functions** Cht. 5 review # 27, 69 When is a function invertible?

**Differential Equations** Cht. 6 review # 1, 17, 21,

How is a solution to a differential equation different from a solution to a regular equation?

**Exponential Growth & Decay** Cht. 6 review # 23, 29

Area Between Curves Cht. 7 review # 3, 7 If both curves are rates of change, then what does the area between represent?