**Algebra 2 CP Worksheet 8.5 #1 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SHOW ALL WORK AND ANSWERS ON SEPARATE PAPER.**

**Use the properties of logarithms to rewrite the expression in terms of log 3 and log 4.**

**Then use log 3 ≈ 0.477 and log 4 ≈ 0.602 to approximate the expression.**

**Expand the expression (write as a sum or difference of logarithms).**

**Condense the expression (write as a single logarithm).**

**Evaluate each expression.**

**Use the change of base formula to rewrite the expression. Then use a calculator to evaluate the expression. Round to three decimal places.**