

MA 115-02 §4.2-4.5	Quiz #4	score	Name: _____ 7 July 2000
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1. Find an exponential model of the form $y = a \cdot b^x$ for the following data. Then estimate the value of y when $x = 2$ to three decimals. (5 points)

x	4	6	8	10
y	5.1	6.5	8.0	11.1

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2. Solve the following equation algebraically: (5 points)

$$\log(x + 4) - \log(2x - 3) = 1$$

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3. A cup of coffee cools from 90°C to 70°C after 10 minutes in a room at 24°C. How long will it take for the coffee to cool to 40°C? (5 points)

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4. How much money would you have to invest in a retirement account that pays a return of 10% per year compounded quarterly so that you would have \$1,000,000 after 40 years? (5 points)