MATH 113: College Algebra with Applications Name:

QUIZ 11

This quiz covers section 4.2.

NO CALCULATORS ALLOWED

Exercise 1: Evaluate each expression without using a calculator (1 point each)

1. $\log_5 25$

2. $\log_6 \left(\frac{1}{36}\right)$

3. $\ln e^2$

4. $\ln 1$

5. $\log 1$

6. $\log_3 \frac{1}{\sqrt{3}}$

7. $7^{\log_7 23}$

8. $\log_{11} 11$

9. $\ln \frac{1}{e^6}$

10. $e^{\ln 5x^2}$

MATH 113: College Algebra with Applications Name:

QUIZ 12

This quiz covers sections 4.1, 4.2.

Exercise 1: Write the following equation in its equivalent exponential form $2 = \log_3 x$ (1point)

Exercise 2: Write the following equation in its equivalent logarithmic form $b^3 = 1000$

(1 point)

Exercise 3: Approximate the number $e^{2.3}$ using a calculator. Round your answer to 3 decimal places. (2 points)

Exercise 4: Graph the logarithmic function: $f(x) = \log(2 - x)$. Hint: Begin by graphing $f(x) = \log x$. Then use transformations of this graph to graph the given function. What is the vertical asymptote? What is the domain and the range of the function? (3 points)

Exercise 5: Graph the exponential function: $f(x) = 2^{x+2} - 1$. Hint: Begin by graphing $f(x) = \log x$. Then use transformations of this graph to graph the given function. What is the vertical asymptote? What is the domain and the range of the function? (3 points)