

ICNS100 Intensive Mathematics
Quiz 2 (10%)

out of 20 points

Name: _____ Student ID _____

1. Write the exponential form in logarithmic form and logarithmic form in exponential form. (3 points)

(a) $x^y = A$. Logarithmic form is

(b) $\log_2(16) = x$. Exponential form is

The value of x from 1(b) is

2. Find the value of $\log_{1/5}(5^3)$. (2 points)

3. If $\log 3 = a$ and $\log 2 = b$, express $\log(\sqrt{60})$ in terms of a and b . (2 points)

4. Write $2 \log_3 5 - \log_3 2$ as a single logarithm. (2 points)

5. Find the value of $\log_{125}(25)$. (2 points)

6. Find the value(s) of x from the equation

$$\log_2(x) = 5 - \log_2(x + 4).$$

(3 points)

7. Suppose you deposit 20,000 baht into a savings account that earns the interest at the rate of 4.8% compounded monthly. What is the compound amount at the end of the fifth year? (3 points)

8. Sketch the graph of

$$y = \log_2(x - 0.5).$$

Also complete the following table of sample points. What is the x intercept? (3 points)

x	1	2.5	4.5	8.5
y				

The x intercept is

