

Name: _____

MATH 111-I

Spring 2025

Quiz 9

Problem 1: Determine whether the table below could represent an exponential function, $f(x)$. Be sure to justify why or why not.

x	1	2	3	4
$f(x)$	3	4.5	6.75	10.125

Problem 2: Consider the function $f(x) = 7(1.38)^x$.

(a) Determine A and b for this exponential function.

(b) What is the y -intercept for $f(x)$?

(c) Determine the growth or shrink rate for $f(x)$.

Problem 3: Let $y = 2^{2-x}$. Determine whether y is exponentially growing or decaying. Be sure to justify your answer. Sketch y below.

