

LESSON 7.1 Assignment

Name _____ Date _____

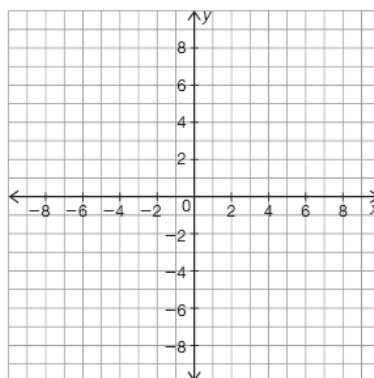
A Rational Existence
Introduction to Rational Functions

 1. Consider the function $f(x) = \frac{4}{x}$.

a. Complete the table.

x	-8	-4	-2	-1	$-\frac{1}{2}$	0	$\frac{1}{2}$	1	2	4	8
f(x)											

b. Use the table to graph the function.



c. Analyze the function and the corresponding table and graph. Describe the domain, range, and end behavior of the function. Determine all of the asymptotes of the function. Explain your reasoning.

LESSON 7.1 Assignment

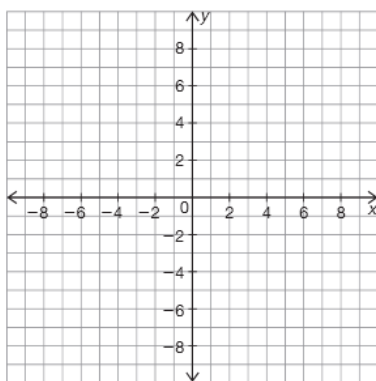
page 2

2. Consider the function $h(x) = \frac{8}{x^2}$.

a. Complete the table.

x	-8	-4	-2	-1	$-\frac{1}{2}$	0	$\frac{1}{2}$	1	2	4	8
$h(x)$											

b. Use the table to graph the function.



c. Analyze the function and the corresponding table and graph. Describe the domain, range, and end behavior of the function. Determine all of the asymptotes of the function. Explain your reasoning.