

MasterMath

Graphing Rational Functions

Name _____

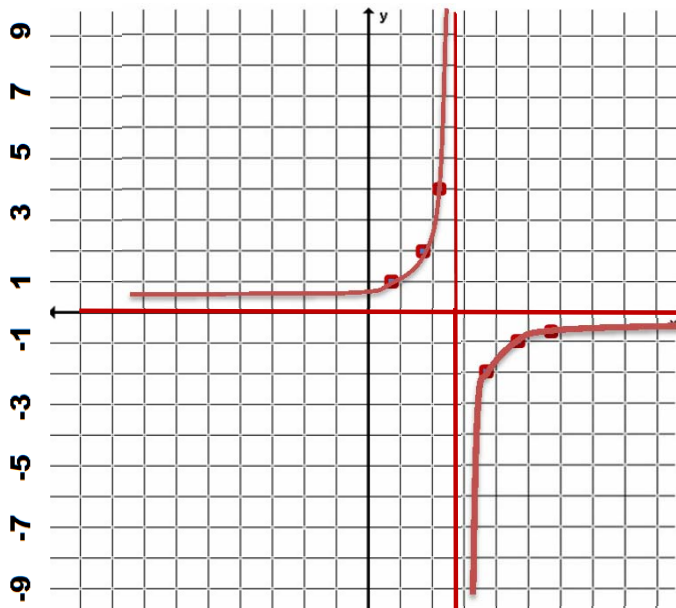
Date _____

1. Graph the function:

$$y = \frac{-2}{x - 2}$$

Be sure to draw the
Asymptotes

x	y
0.0	1.0
1.0	2.0
1.5	4.0
2.0	#####
3.0	-2.0
4.0	-1.0
5.0	-0.7



2. Graph the function:

$$y = \frac{1}{x + 1} + 2$$

Be sure to draw the
Asymptotes

x	y
1.0	2.5
0.0	3.0
-0.5	4.0
-1.0	#####
-1.5	0.0
-2.0	1.0
-3.0	1.5



3. Write the equation for the lines that are the
Asymptotes of this function:

$$y = \frac{3}{x - 6} - 4.5$$

Vertical Asymptote	Horizontal Asymptote
$x = 6$	$y = -4.5$

4.

What is the Domain and Range of this function

$$y = \frac{-2}{x} - 5$$

Domain	Range
All real numbers except 0	All real numbers except -5