

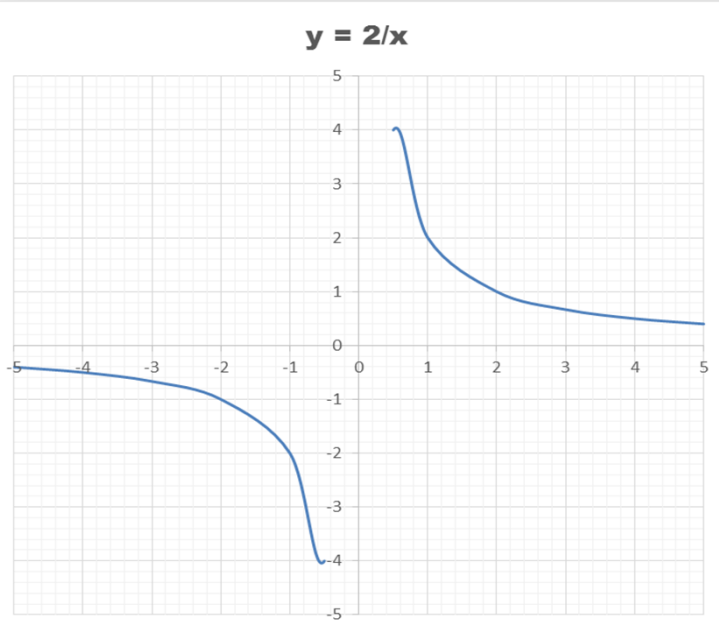
Name _____

Date _____

Inverse Variation

1. Graph this equation: $5xy = 10$

x	y
5	0.4
4	0.5
3	0.66666667
2	1
1	2
0.5	4
0	
-0.5	-4
-1	-2
-2	-1
-3	-0.66666667
-4	-0.5
-5	-0.4



2. Regarding the equation and graph in Question 1:

What are the Asymptotes?

When $x = 0$, what does y equal?

What is the Domain or the function?

What is the Range or the function?

What is the Constant of Variation?

What do we call this type of curve?

x axis and y axis
undefined
all real numbers except zero
all real numbers except zero
2
hyperbola

3. In a formula, Z varies inversely as p . If Z is 200 when $p = 4$, find Z when $p = 10$.

80

4. In kick boxing, it is found that the force, f , needed to break a board, varies inversely with the length, l , of the board. If it takes 5 lbs of pressure to break a board 2 feet long, how many pounds of pressure will it take to break a board that is 6 feet long?

$1\frac{2}{3}$

5. A biker's speed (s) determines the amount of time (t) it takes to travel 1 mile (assume the biker travels at a constant rate). Write an equation to describe this relationship.

$t = 1/s$

