

$$a) f(x) = \frac{2x+1}{x^2-9} \quad \frac{2x+1}{(x+3)(x-3)}$$

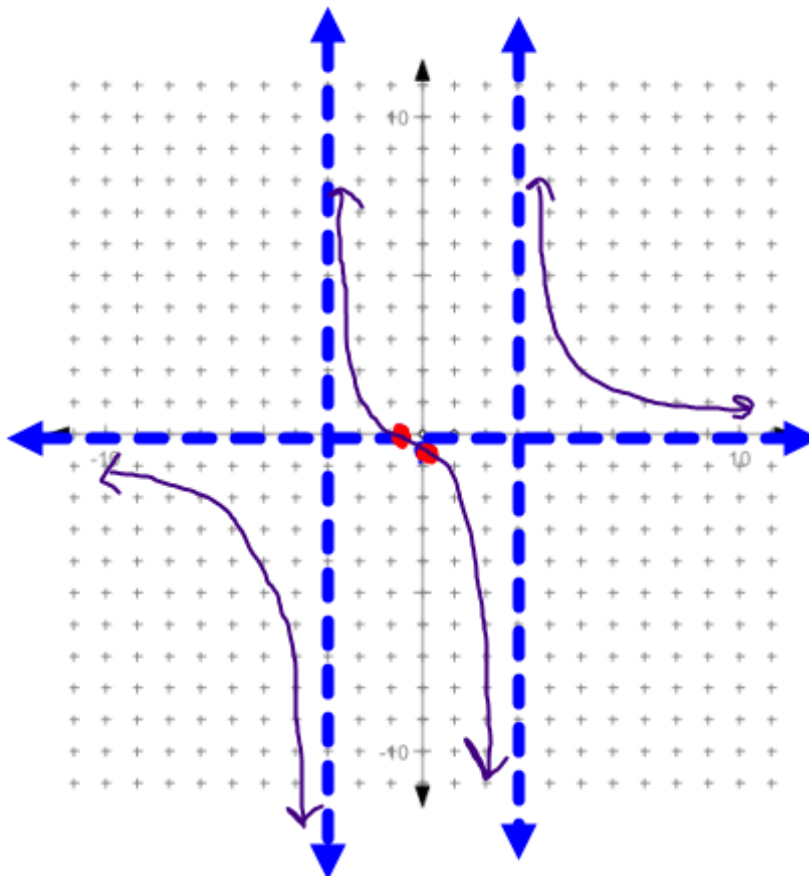
VA:  $x=3$  or  $-3$

HA:  $y=0$

SA: N/A

Intercepts: x-int:  $-\frac{1}{2}$  or  $-.5$

y-int:  $-\frac{1}{9}$  or  $-.11$



$$b) \frac{x^2 + 4x + 4}{x - 1} \quad (x+2)(x+2)$$

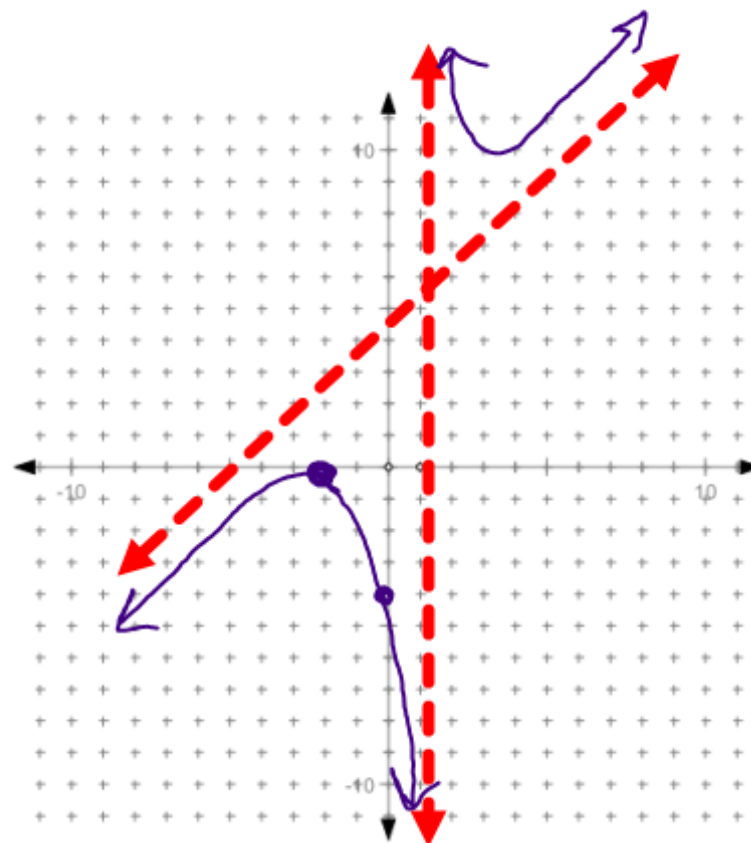
VA:  ~~$x = 1$~~

~~HA:~~

SA:  $y = x + 5$

Intercepts:  $y\text{-int} = -4$

$x\text{-int} = -2$



$$x = -2$$

$$x = -2$$

-2 multiplicity  
of 2

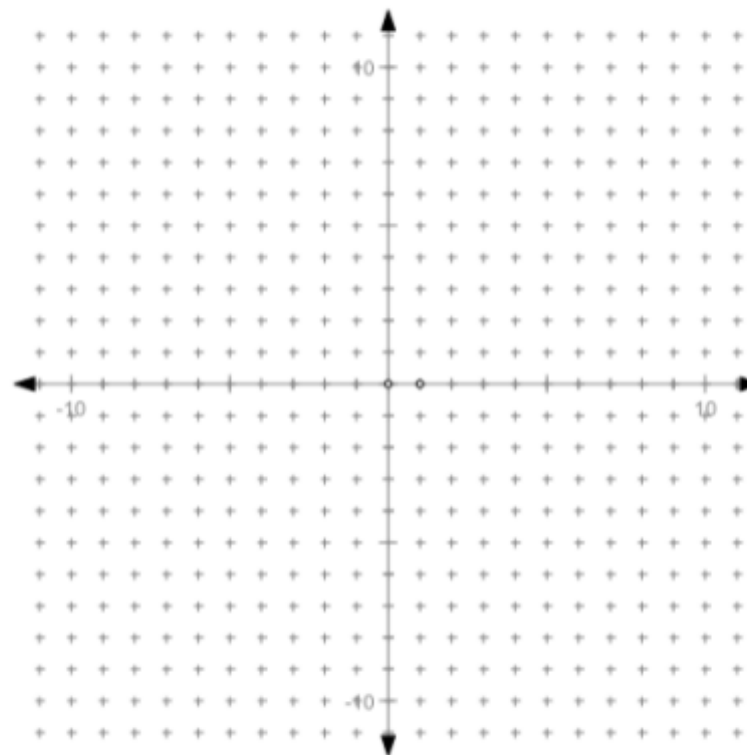
$$c) f(x) = \frac{x+1}{x^2+4x+3}$$

VA:

HA:

SA:

Intercepts:



We're going to get 4 new problems today.

You will get 1 problem at a time and earn 25 points per problem.

When you finish a problem, you will turn it in and receive a new problem.

You will not be given a new problem if the one you turn in is not complete!

Today's work is worth a total of 100 points. You will only earn points for the problems you complete!!