Graph
Solve
Find Equation
Word Problems

C12 - 9.0 - Rats Graph/Find Eq Review

1) Graph/State the Domain and Range and Asymptote(s) and find any Intercepts. Identify End Behavior and behavior near Asymptote(s).

$a)\ y = \frac{1}{x} + 1$

$b)\ y = \frac{1}{x-1} + 1$

$c)\ y = \frac{1}{x^2 - 4}$

$d)\ y = \frac{x^2 + 6x + 5}{x + 2}$

$e)\ y = \frac{x + 3}{2x^2 + 5x - 3}$

$f)\ y = \frac{x^2}{x + 1}$

$g)\ y = \frac{x^2 + 3x + 3}{x + 2}$

$h)\ y = \frac{1}{x^2 + 1}$

$i)\ y = \frac{x^4 - 8x}{x^3 - 4x}$

2) Solve for x.

$a)\ 7x - 6 = \frac{x}{2x - 1}$

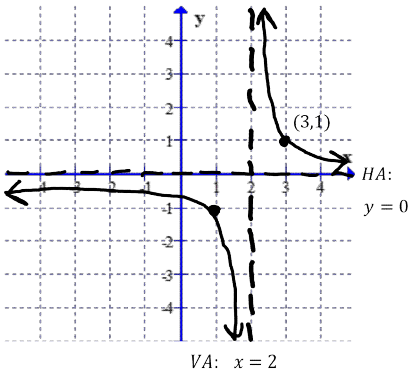
$b)\ \frac{3x}{x^2 - 4} = \frac{12}{x + 2} - 1$

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

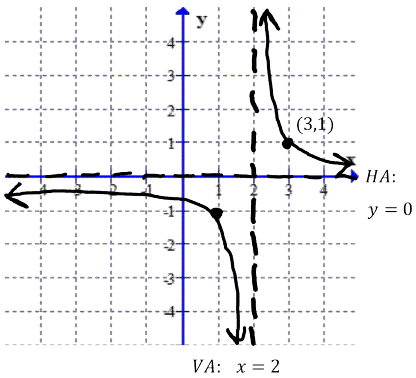
C12 - 9.0 - Rats Graph/Find Eq Review

3) Find the Equation.

a)



b)



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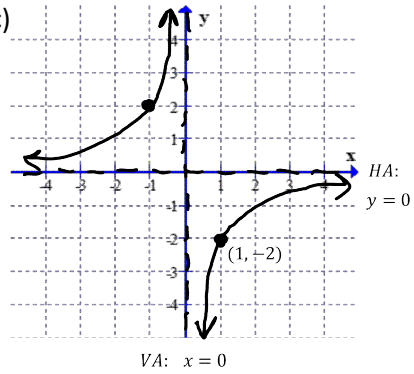
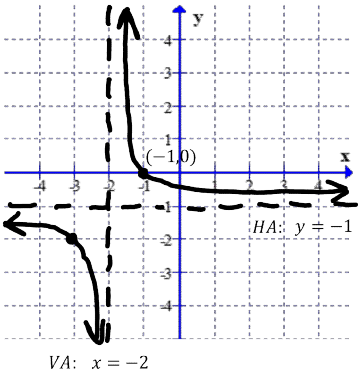
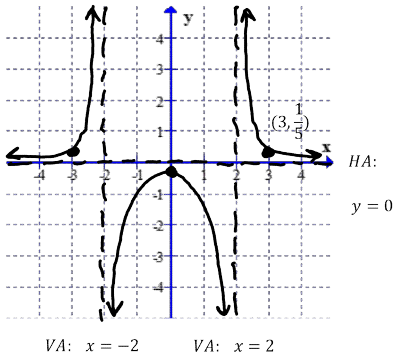


d)



e)



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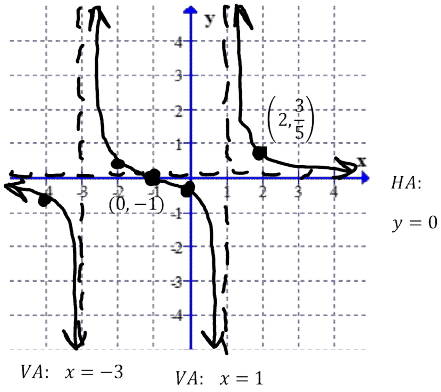
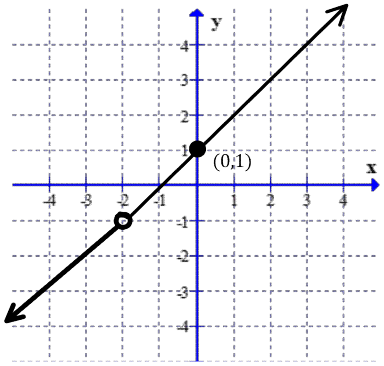
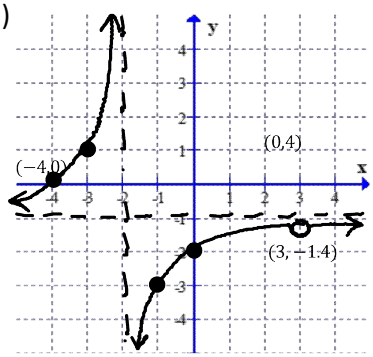


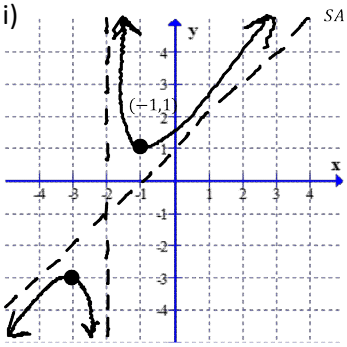
g)



h)



i)



4) Go-Carts/Geometry/Rates.

a) If it costs \$10 to enter the go-cart stadium and \$5/hr to go-cart. Find the function for the average cost

b) An open top box with a square base has a volume of 60 m^3. Find the function for the surface area.

c) Find the speed of the boat in still water if Mary paddles down river 40km with a current of 6km/h and the same time to paddle up river against the current 16km.