Asymptotes (#38)

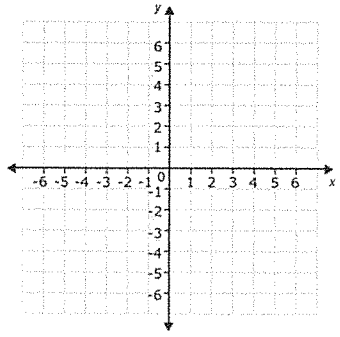
List the domain, all asymptotes (if any), holes, and *x*-intercepts, and graph the function.

1. $f(x) = \frac{2x-6}{x+4}$

Domain:

VA: HA:

Holes: *x*-intercepts:

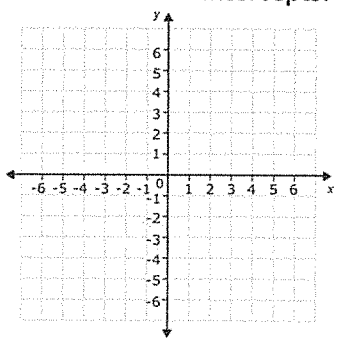


2. $f(x) = \frac{x-1}{x^2-4x+3}$

Domain:

VA: HA:

Holes: *x*-intercepts:

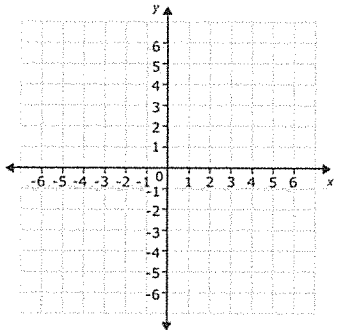


3. $f(x) = \frac{x^2+5x+6}{2x^2-18}$

Domain:

VA: HA:

Holes: *x*-intercepts:

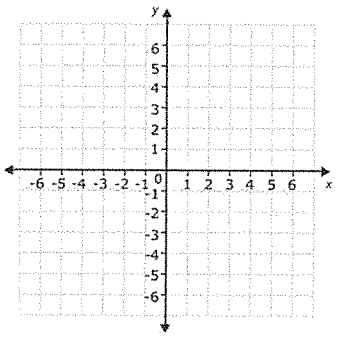


4. $f(x) = -1 - \frac{1}{(x-2)^4}$

Domain:

VA: HA:

Holes: *x*-intercepts:

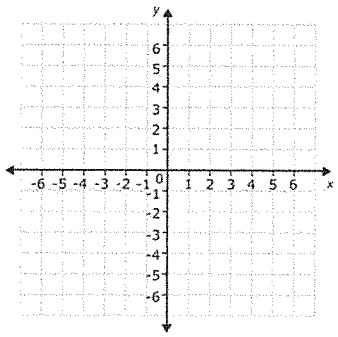


5. $f(x) = \frac{x^4-4x^2}{x+2}$

Domain:

VA: HA:

Holes: *x*-intercepts:

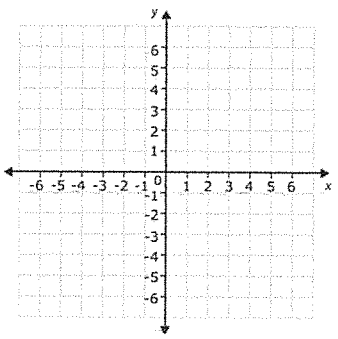


6. $f(x) = \frac{5x^2-10x}{x^2-3x}$

Domain:

VA: HA:

Holes: *x*-intercepts:

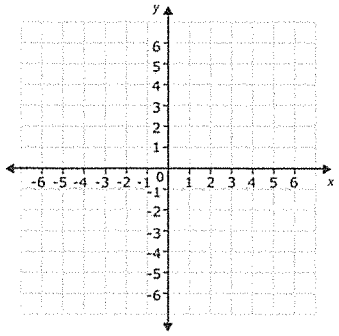


7. $f(x) = \frac{1-x}{2x-3} + 1$

Domain:

VA: HA:

Holes: *x*-intercepts:

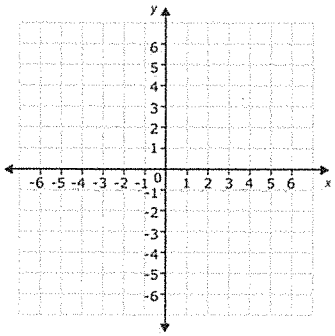


8. $f(x) = \frac{2x^2-3x}{x}$

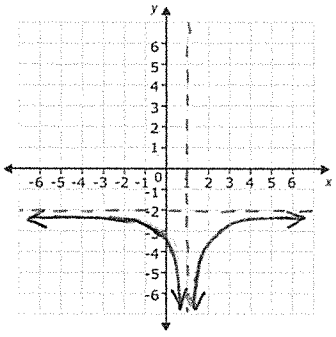
Domain:

VA: HA:

Holes: *x*-intercepts:



9.



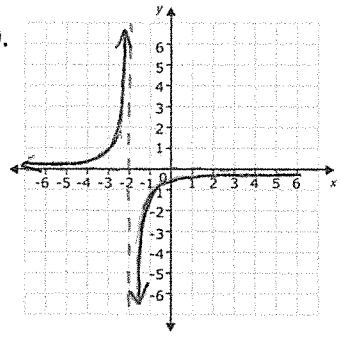
Domain:

VA: HA:

Holes: *x*-intercepts:

$f(x) =$

10.



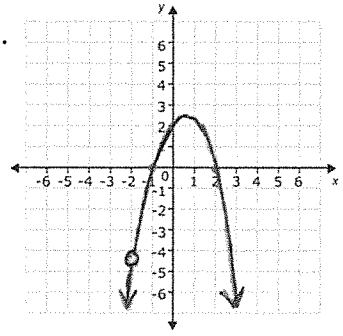
Domain:

VA: HA:

Holes: *x*-intercepts:

$f(x) =$

11.



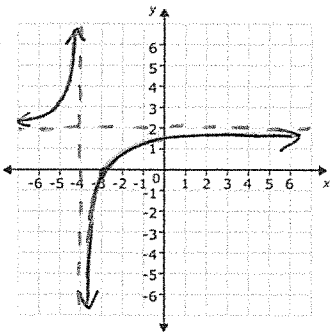
Domain:

VA: HA:

Holes: *x*-intercepts:

$f(x) =$

12.



Domain:

VA: HA:

Holes: *x*-intercepts:

$f(x) =$