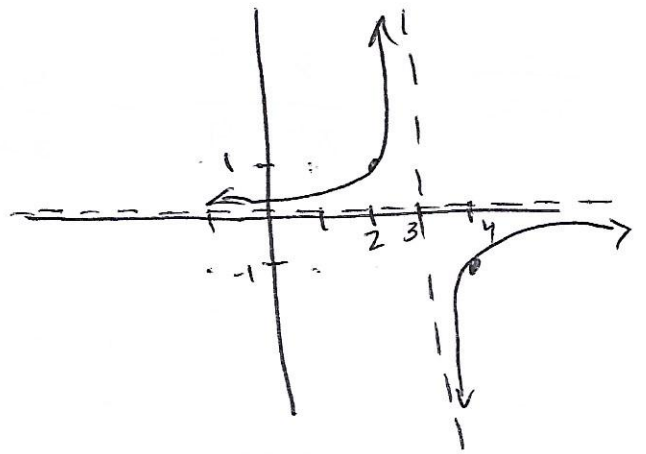


20.  $g(x) = -\frac{1}{x-3}$

reflect over x-axis  
right 3



21)  $f(x) = \frac{2x+3}{x-2}$

holes: none  
VA:  $x=2$   
HA:  $y=2$

22)  $f(x) = \frac{x^2-x-12}{x-4}$

$f(x) = \frac{(x-4)(x+3)}{(x-4)}$   
 $= x+3$

Hole:  $(4, -3)$   
VA: None  
HA: None

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

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

Hole:  $(2, 1/4)$   
VA:  $x=-2$   
HA:  $y=0$

24)  $f(x) = \frac{-4(x^2-5x-6)}{2(x^2-2x-3)}$

$= \frac{-4(x-6)(x+1)}{2(x-3)(x+1)}$

$= \frac{-2(x-6)}{x-3}$

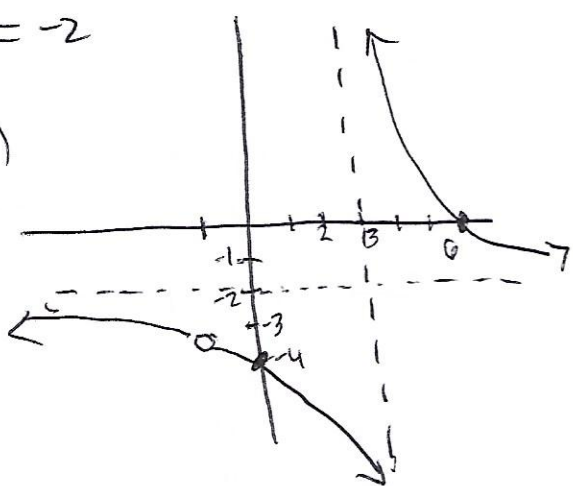
Hole:  $(-1, -7/2)$

VA:  $x=3$

HA:  $y=-2$

xint:  $(6, 0)$

yint:  $(0, -4)$



25)  $f(x) = \frac{x+1}{x^2-1}$

$= \frac{x+1}{(x+1)(x-1)}$

$= \frac{1}{x-1}$

Hole:  $(-1, -1/2)$

VA:  $x=1$

HA:  $y=0$

xint: none

yint:  $(0, -1)$

