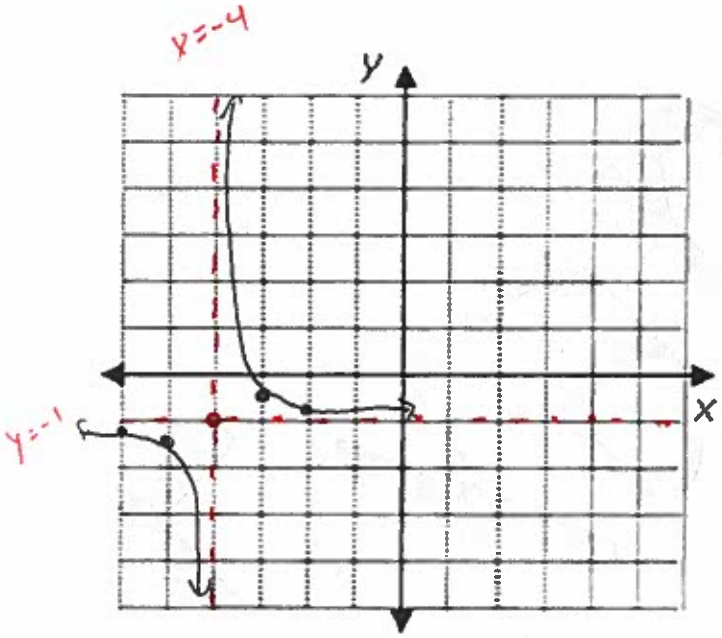
Identify the asymptotes (horizontal and vertical) of each function. Then graph the function. State the domain and range:

$g(x)=\dfrac{\frac{1}{2}}{x+4}-1$ or $g(x)=\dfrac{.5}{x+4}-1$ center $(-4,-1)$

to the right of -4 {

to the left of -4 {

x	y
-3	-.5
-2	-.75
-5	-1.5
-6	-1.25



For $x=-3$

$g(x)=\dfrac{.5}{(-3)+4}-1$

$=.5-1$

$=-.5$

For $x=-2$

$g(x)=\dfrac{.5}{(-2)+4}-1$

$=\dfrac{.5}{2}-1$

$=\dfrac{1}{4}-1$

$=-\dfrac{3}{4}$ or $-.75$

For $x=-5$

$g(x)=\dfrac{.5}{(-5)+4}-1$

$=-.5-1$

$=-1.5$

For $x=-6$

$g(x)=\dfrac{.5}{(-6)+4}-1$

$=\dfrac{.5}{-2}-1$

$=-\dfrac{1}{4}-1$

$=-1.25$

V.A. $x=-4$

H.A. $y=-1$

D: $x\neq -4$; $\mathbb{R}$

R: $y\neq -1$; $\mathbb{R}$