FST 3-2 Warm up

1. a. Graph $f(x)=\frac{1}{x}$ *and* $g(x)=\frac{1}{x+4}-1$, on the same set of axes.

↓1 ↗ ↳ L4

b. Find equations for the asymptotes of g. How are they related to the asymptotes of f?

g(x) Asymptote $x=-4$ $y=-1$

f(x) ★ Left 4 ★ Down 1 $T(x,y) \Rightarrow (x-4, y-1)$ ↳ Asymptotes $x=0$ $y=0$

c. Give the domain and range of f and g.

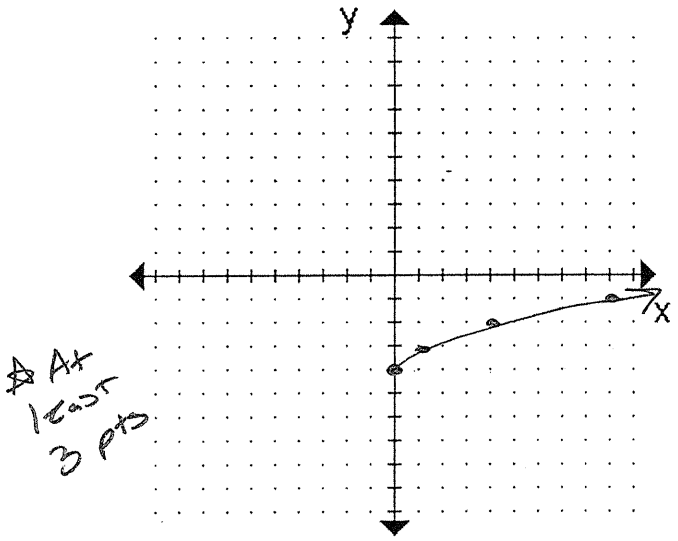
f(x) D: $\{x \mid x \neq 0\}$ R: $\{y \mid y \neq 0\}$

g(x) D: $\{x \mid x \neq -4\}$ R: $\{y \mid y \neq -1\}$

2. Graph without a calculator:

$y=\sqrt{x}-4$ · Down 4 · Square Root

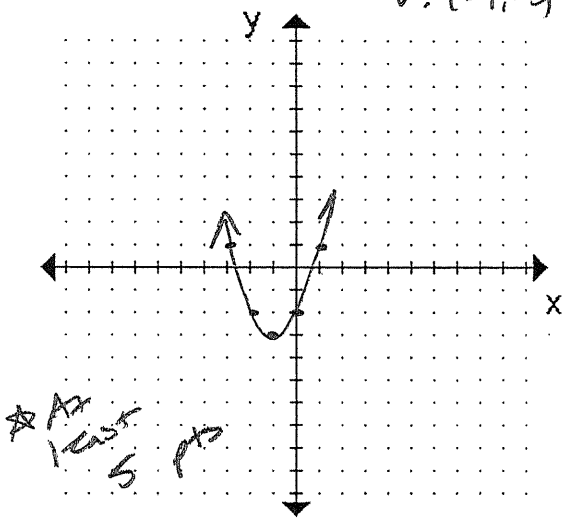
Start: (0, -4)



★ At least 3 pts

$y=(x+1)^2-3$ ↳ L1 ↳ ↓3

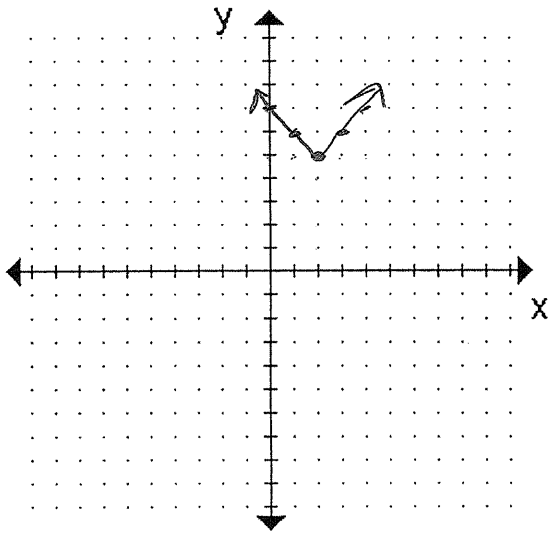
V: (-1, -3)



★ At least 5 pts

$y=|x-2|+5$ ↳ ↑5 ↳ R 2

V: (2, 5)



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