

Math 16A
Vogler

Using Asymptote & Intercept Data to Graph Function

Ex Consider function $y=f(x)=\frac{x+3}{x-1}$ with the following data (which I encourage you to verify):
x-int: $x=-3$; y-int: $y=-3$; H.A. @ $y=1$ with $\lim_{x \rightarrow \pm\infty} f(x)=1$;
V.A. @ $x=1$ with $\lim_{x \rightarrow 1^-} f(x)=-\infty$ and $\lim_{x \rightarrow 1^+} f(x)=+\infty$.
Here's the function's graph with the data highlighted:

