

Asymptotes

- Horizontal: $\lim_{x \rightarrow -\infty} f(x) = c$ OR $\lim_{x \rightarrow \infty} f(x) = c$
- Vertical: $\lim_{x \rightarrow a^-} f(x) = \pm\infty$ OR $\lim_{x \rightarrow a^+} f(x) = \pm\infty$
- Oblique (slant) $y=mx+n$
 $m = \lim_{x \rightarrow a} \frac{f(x)}{x}$ $n = \lim_{x \rightarrow a} (f(x) - mx)$ where $a=\pm\infty$