

**Horizontal Asymptote** – if there exists a number  $c$  such that the curve  $f(x)$  approaches  $c$  as  $x$  approaches  $\infty$  or  $f(x)$  approaches  $c$  as  $x$  approaches  $-\infty$ , then the line  $y=c$  is called a horizontal asymptote of the curve  $f(x)$ .