$as x \to \infty, f(x) \to \infty$	$as x \rightarrow \infty, f(x) \rightarrow \infty$
$as x \to -\infty, f(x) \to -\infty$	$as x \rightarrow -\infty, f(x) \rightarrow \infty$
$as x \to \infty, f(x) \to \infty$	as $x \to \infty$ , $f(x) \to \infty$
$as x \to -\infty, f(x) \to -\infty$	as $x \to -\infty$ , $f(x) \to -\infty$
$as x \to \infty$ , $f(x) \to \infty$	$as x \rightarrow \infty$ , $f(x) \rightarrow 3$
$as x \to 0$ , $f(x) \to 0$	$as x \rightarrow -\infty$ , $f(x) \rightarrow 3$
as $x \to \infty$ , $f(x) \to 0$	as $x \to \infty$ , $f(x) \to \infty$
as $x \to -\infty$ , $f(x) \to 0$	as $x \to -\infty$ , $f(x) \to \infty$