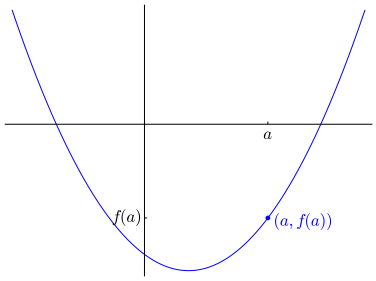
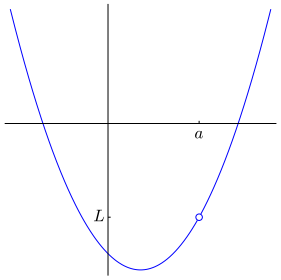
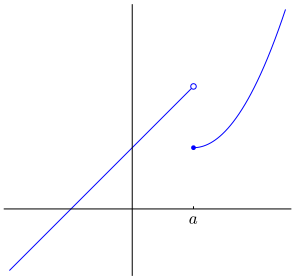
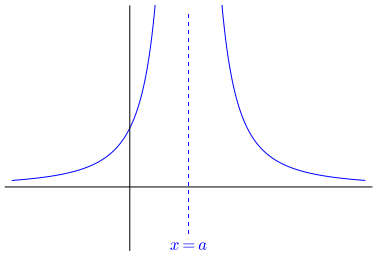
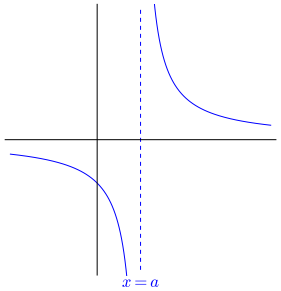
Limits

Case	Sample Graph	Technique	Answer
continuous at $x = a$		direct evaluation	$\lim_{x \to a} f(x) = f(a)$
hole at $x = a$		factor and cancel	$\lim_{x \to a} f(x) = L$
jump at $x = a$		graph or table of values	$\lim_{x \to a} f(x)$ does not exist
vertical asymptote at $x = a$		graph or table of values	$\lim_{x \to a} f(x) = \infty$
		graph or table of values	$\lim_{x \to a} f(x)$ does not exist