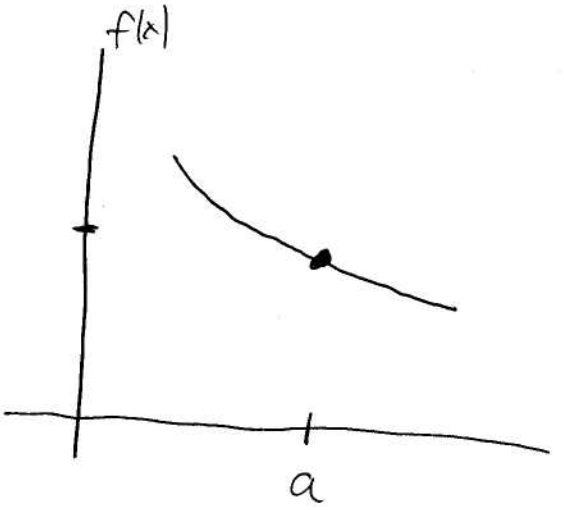
Calc BC Section 2.3 Notes Continuity

A function $f(x)$ is continuous at point a if $\lim_{x\to a^+} = \lim_{x\to a^-} = f(a)$.

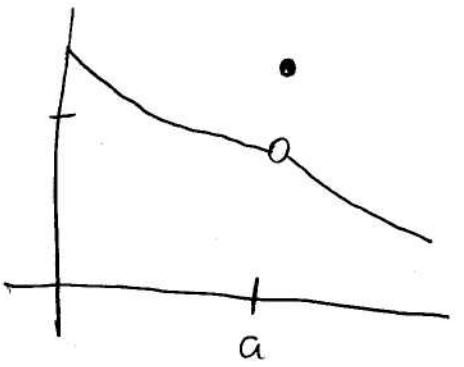


$\lim_{x\to a^-} f(x) = b$

$\lim_{x\to a^+} f(x) = b$

$f(a) = b$

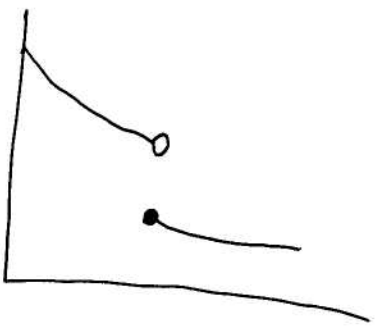
continuous at $x=a$



$\lim_{x\to a^-} = \lim_{x\to a^+} \neq f(a)$

discontinuous at $x=a$

point discontinuity



Jump discontinuity