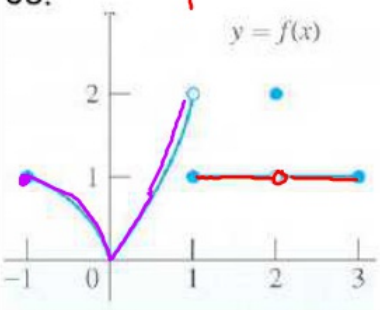
What you'll Learn About
- One-Sided and Two Sided Limits
- Properties of Limits

$x \to 1$ $y \to$

The answer to a limit is the y-value

38.



Jump Discontinuity
- left and right limits are different

Removeable Discontinuity
- there is still a limit at $x=2$

a) $\lim_{x\to 1^-} f(x) = 2$ b) $\lim_{x\to 1^+} f(x) = 1$ c) $\lim_{x\to 1} f(x) =$ DNE d) $f(1) = 1$ (1,)

e) $\lim_{x\to 0^+} f(x) = 0$ f) $\lim_{x\to 0^-} f(x) = 0$ g) $\lim_{x\to 0} f(x) = 0$ h) $f(0) = 0$

Continuity = Continuous Function

i) $\lim_{x\to 1^-} f(x) = 1$ j) $\lim_{x\to 3^-} f(x) = 1$ k) $\lim_{x\to 2} f(x) =$

a) $\lim_{x\to 1^-} f(x)$

The limit of the function as x approches 1 from the left side of the graph

True/ False

l) $\lim_{x\to c} f(x)$ exists at every c between (-1,1) — True

interval

c is any x-value between x=-1 and x=1

m) $\lim_{x\to c} f(x)$ exists at every c between (1,3) — True

n) $\lim_{x\to c} f(x)$ exists at every c between (-1,3)

False, b/c of jump at x=1