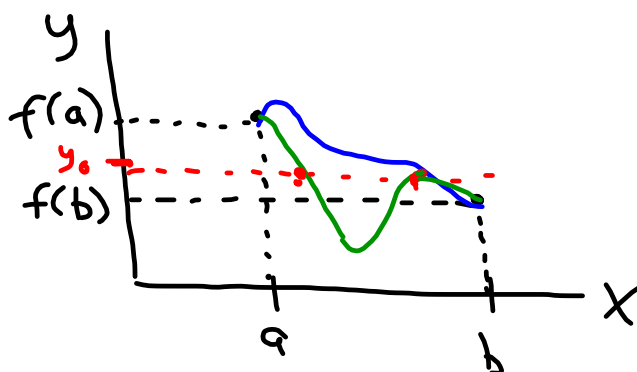


Topic: IVT Intermediate Value Theorem (p. 83)

- ① $f(x)$ is continuous on $[a, b]$
and ② y_0 is a y-value between
 $f(a)$ and $f(b)$.

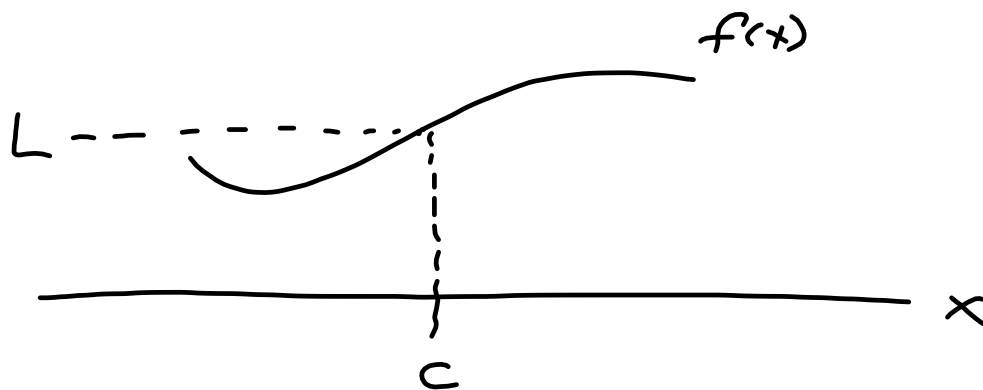


Conclusion: There must be an
x-value ("c") on (a, b)
such that $f(c) = y_0$.

mark:
if $f(x)$ not continuous
on $[a, b]$

$\exists R$ if y_0 not between $f(a)$
and $f(b)$:

IVT says: NOTHING..



$$\#16 \quad y = \sqrt[3]{2x-1}$$

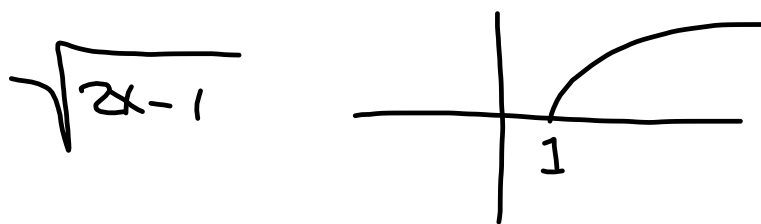
$$y = \sqrt[3]{x}$$



$$\sqrt[3]{2x-1}$$



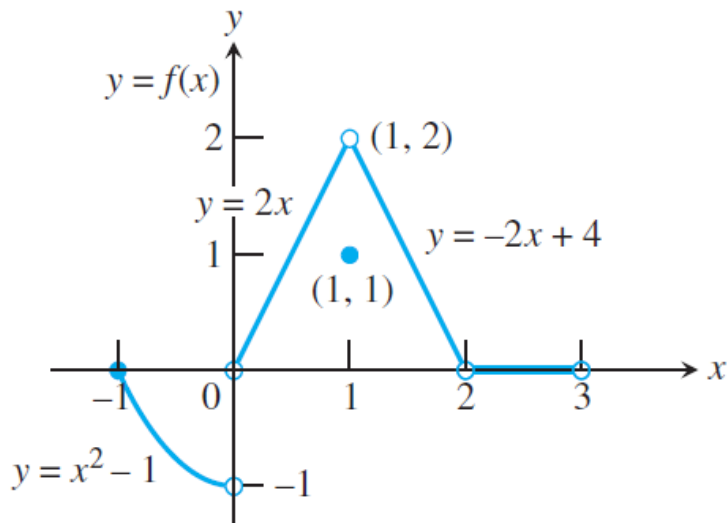
no points of discont.



$$f(-1) = 0$$

↑
x-value

18. yes,
set $f(3) = 0$
 $0, 2 < x \leq 3$



domain: $[-1, 0)$
 $(0, 2)$
 $(2, 3)$