

Sec 1.4 Continuity

Formal defⁿ of continuity
in book: (Get one.)

A fn is continuous if

In Math

1) $f(c)$ is defined

2) $\lim_{x \rightarrow c} f(x)$ exists

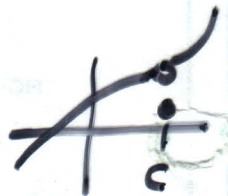
3) $\lim_{x \rightarrow c} f(x) = f(c)$

In Eng

1) No holes

2) No jumps
or asymp

3) No
dot
piecewise



In Kinder... can't lift pencil off page

Removable discontinuity
hole

Nonremovable discont.
jump, asymp.

If Discontinuous?

~~lim~~ exists \rightarrow you have a hole

lim DNE \rightarrow you have a jump, asymp