

1.4b The Limit of a Function (Con't)

Example 1.4b.1

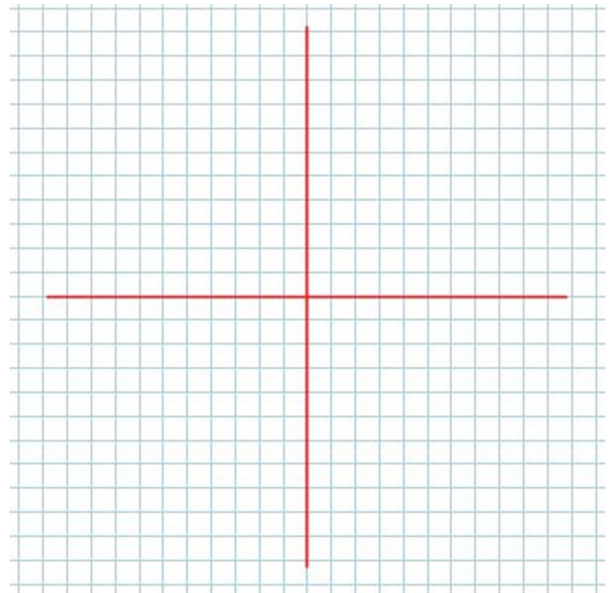
Determine $\lim_{x \rightarrow 3} (f(x))$ for

$$f(x) = \begin{cases} x - 4, & x \leq 3 \\ x^2 - 10, & x > 3 \end{cases}$$

Example 1.4b.2

Sketch the graph of a function $f(x)$ with the following properties:

- 1) $\lim_{x \rightarrow 0^-} (f(x)) = -1$
- 2) $\lim_{x \rightarrow 0^+} (f(x)) = +1$
- 3) $f(0) = 0$
- 4) $\lim_{x \rightarrow 2} (f(x)) = 4$
- 5) $f(2) = 3$



Class/Homework for Section 1.4b

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