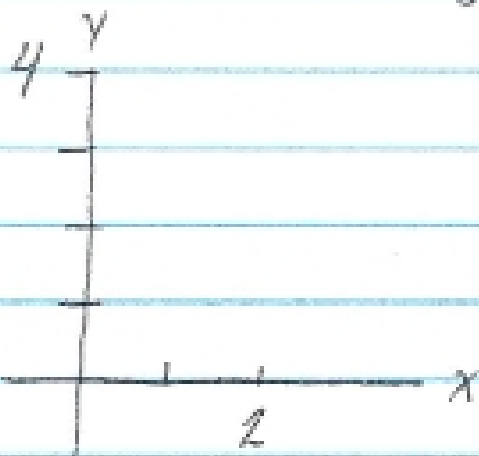


## NOTE CHECK → 1.4

EX 1: ARE THESE CONT. AT  $x=2$ ?

$$f(x) = \frac{x^2 - 4}{x - 2}; \quad g(x) = \begin{cases} \frac{x^2 - 4}{x - 2}, & x \neq 2 \\ 3, & x = 2 \end{cases}; \quad h(x) = \begin{cases} \frac{x^2 - 4}{x - 2}, & x \neq 2 \\ 4, & x = 2 \end{cases}$$



EX 2 = Prove  $f(x) = \sqrt{16 - x^2}$  IS CONT.  $[-4, 4]$

• CHECK  $(-4, 4)$

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

$$\cdot \lim_{x \rightarrow -4^+} \sqrt{16 - x^2}$$

$$\cdot \lim_{x \rightarrow -4^-} \sqrt{16 - x^2}$$

$$\text{EX 3: } f(x) = \frac{x^2 - 4}{x^2 + x - 6}$$

DISCONTINUITIES:

$$\underline{\text{Ex 5:}} \quad \lim_{x \rightarrow 4} |10 - 3x^2|$$