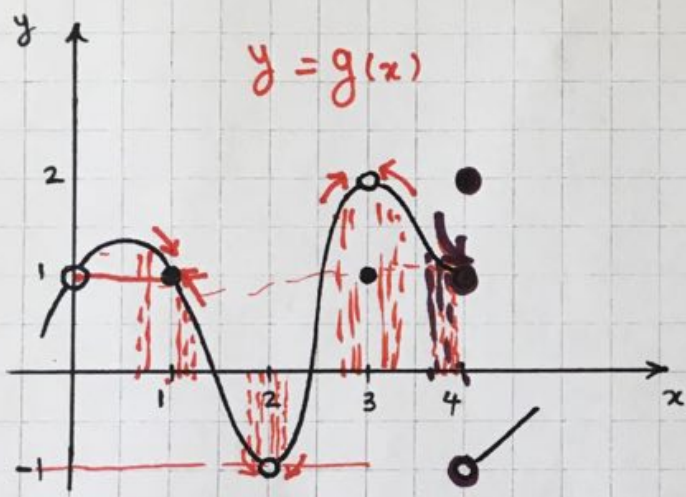


$$\begin{aligned} \lim_{x \rightarrow 1} f(x) + g(x) &= \\ &= \lim_{x \rightarrow 1} f(x) + \lim_{x \rightarrow 1} g(x) \\ &= 2 + 1 \\ &= 3 \end{aligned}$$



$$\begin{aligned} \lim_{x \rightarrow 2} f(x) \cdot g(x) &= \\ &= \lim_{x \rightarrow 2} f(x) \cdot \lim_{x \rightarrow 2} g(x) \\ &= 2 \cdot (-1) = -2 \end{aligned}$$

$$\lim_{x \rightarrow 4^-} \frac{f(x)}{g(x)} =$$

just look at left of 4

$$\frac{\lim_{x \rightarrow 4^-} f(x)}{\lim_{x \rightarrow 4^-} g(x)} = \frac{2}{1} = 2$$

$$g(4) = 2$$

$$\begin{aligned} \lim_{x \rightarrow 3} g(x) + 5 &= \\ &= \lim_{x \rightarrow 3} g(x) + \lim_{x \rightarrow 3} 5 \quad \text{a constant function} \\ &= 2 + 5 = 7 \end{aligned}$$