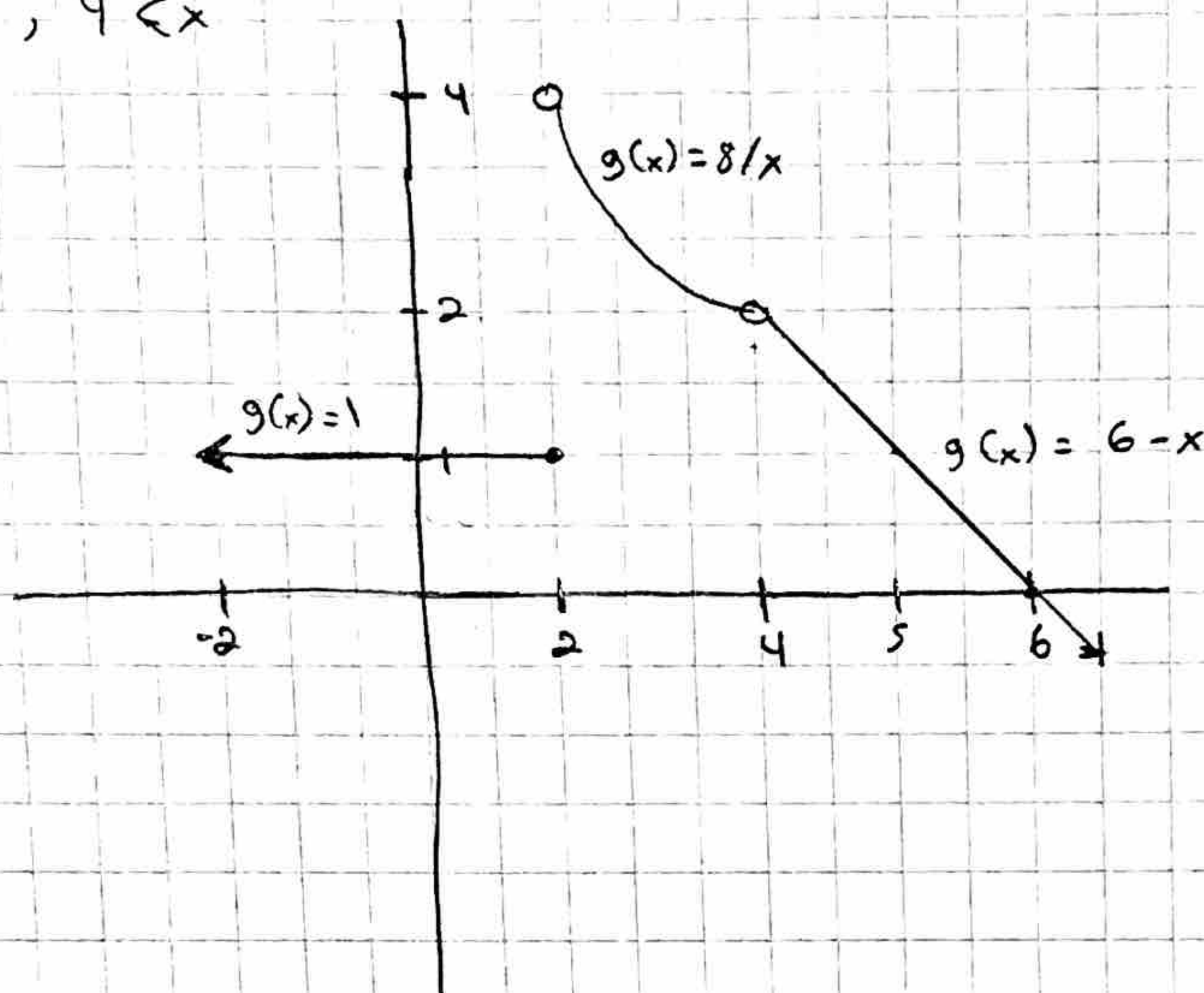


13. $g(x) = \begin{cases} 1, & x \leq 2 \\ 8/x, & 2 < x < 4 \\ 6-x, & 4 \leq x \end{cases}$

Use definition to build graph



Determine Limit

Using Graph Not Definitions

$x = 0$

$$\lim_{x \rightarrow 0^-} g(x) = 1$$

$$\lim_{x \rightarrow 0^+} g(x) = 1$$

$$\lim_{x \rightarrow 0} g(x) = 1$$

$x = 2$

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

$$\lim_{x \rightarrow 2^+} g(x) = 4$$

$$\lim_{x \rightarrow 2} g(x) = \text{DNE}$$

$x = 4$

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

$$\lim_{x \rightarrow 4^+} g(x) = 2$$

$$\lim_{x \rightarrow 4} g(x) = 2$$

$x = 5$

$$\lim_{x \rightarrow 5^-} g(x) = 1$$

$$\lim_{x \rightarrow 5^+} g(x) = 1$$

$$\lim_{x \rightarrow 5} g(x) = 1$$