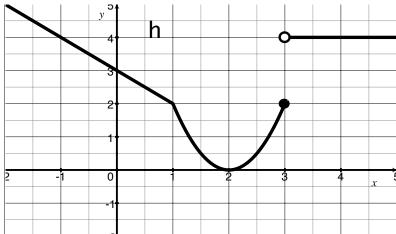
## TMATH 124: Quiz 1

Reasonable supporting work must be shown to earn credit.

1. [4] Use the graph of h below to find the limits (either numerically, graphically, or algebraically), if they exist:

$$\lim_{x \to 3^+} h(x)$$



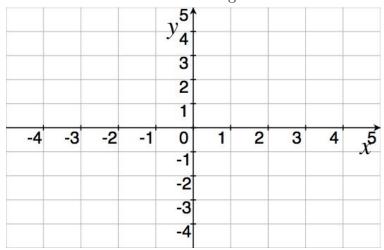
 $\lim_{x \to 3} h(x)$ 

2. [4] Sketch the graph of a function  $\alpha$  that satisfies all of the following.

(a) 
$$\lim_{x \to -1} \alpha(x) = 3$$

(b) 
$$\lim_{x \to 2^{-}} \alpha(x) = -3$$

(c) 
$$\alpha(2) = 0$$



3. [2] Find the limit (either numerically, graphically, or algebraically), if it exists:  $\lim_{t\to 0} \frac{2\sin(t)}{t}$