1. Sketch the graph of a function \( g(x) \) that clearly possesses all of the following properties. Include the \( x \)- and \( y \)-axes in your sketch.

a. \( \lim_{x \to 2^+} g(x) = -1 \)

b. \( \lim_{x \to 2} g(x) \) does not exist.

c. \( g(2) = 0 \)

d. \( \lim_{x \to -1} g(x) = 1 \)

e. \( g(-1) = 2 \)

f. \( \lim_{x \to 3^+} g(x) = \infty \)

g. \( \lim_{x \to 4} g(x) = 1 \)

h. \( g(4) = 1 \)

i. \( \lim_{x \to 3^-} g(x) = -\infty \)