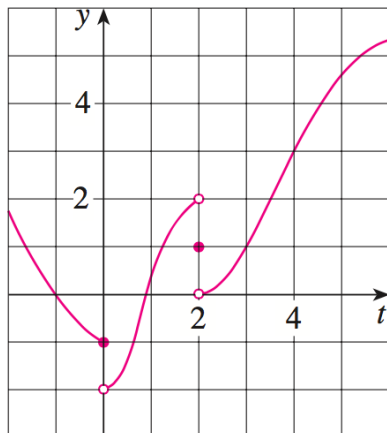# Math 1300-005 - Spring 2017
Introduction to Limits, Pt. II - 1/24/17

Guidelines: Please work in groups of two or three. Please show all work and clearly denote your answer.

1. For the function f whose graph is given below, state the value of each quantity, if it exists. If it does not exist, *please explain why.*

(a) $\lim\limits_{x \to 0^-} f(x)$

(b) $\lim\limits_{x \to 0^+} f(x)$

(c) $\lim\limits_{x \to 0} f(x)$

(d) $\lim\limits_{x \to 2^-} f(x)$

(e) $\lim\limits_{x \to 2^+} f(x)$

(f) $\lim\limits_{x \to 2} f(x)$

(g) $\lim\limits_{x \to 4} f(x)$

(h) $f(2)$

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2. For the function g whose graph is given below, state the value of each quantity, if it exists. If it does not exist, *please explain why.*
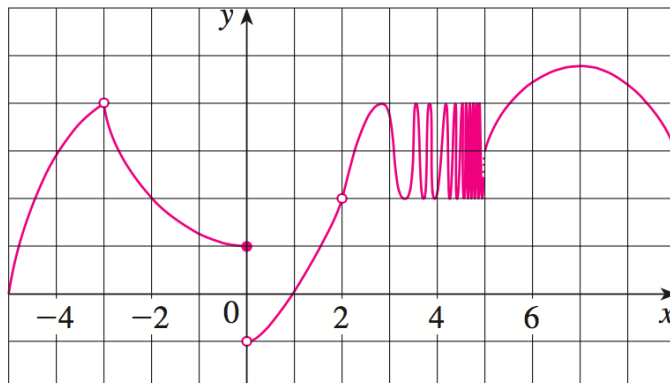
(a) $\lim\limits_{x \to -3^-} g(x)$

(b) $\lim\limits_{x \to -3^+} g(x)$

(c) $\lim\limits_{x \to -3} g(x)$

(d) $\lim\limits_{x \to 0^-} g(x)$

(e) $\lim\limits_{x \to 0^+} g(x)$

(f) $\lim\limits_{x \to 0} g(x)$

(g) $\lim\limits_{x \to 2} g(x)$

(h) $\lim\limits_{x \to 5^+} g(x)$

(i) $\lim\limits_{x \to 5^-} g(x)$

(j) $g(-3)$

(k) $g(0)$

(l) $g(2)$