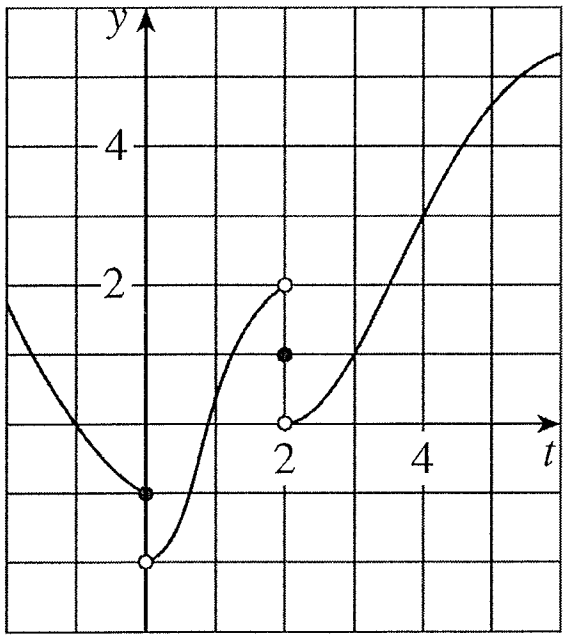
Math 1823-004 Quiz 3 Spring 2016

Name: Solution

Student Number:

Problem 1

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



(a) $lim_{t\to 0^-} f(t) = -1$

(b) $lim_{t\to 0^+} f(t) = -2$

(c) $lim_{t\to 0} f(t) =$ DNE

$\lim_{t\to 0^-} f(t) \neq \lim_{t\to 0^+} f(t)$

(d) $lim_{t\to 2^-} f(t) = 2$

(e) $lim_{t\to 2^+} f(t) = 0$

(f) $lim_{t\to 2} f(t) =$ DNE

$\lim_{t\to 2^-} f(t) \neq \lim_{t\to 2^+} f(t)$

(g) $f(2) = 1$

(h) $lim_{t\to 4} f(t) = 3$