Name ____________________________

- No calculators allowed.
- Show sufficient work to justify each answer.
- You have 20 minutes for this quiz.

1. Find and simplify
   (a) (1 point) \( \log(1000) \)

   (b) (1 point) \( \log_{16} \left( \frac{1}{4} \right) \)

   (c) (2 points) \( 3^{-2 \log_3(2)} + e^{\ln(8) - \ln(4)} \)

2. (2 points) There is an odd polynomial function \( f(x) \) which takes the following values:
   \( f(1) = 2 \quad f(2) = -3 \quad f(3) = 4 \quad f(4) = 5 \quad f(5) = -2 \quad f(6) = 3 \)

   Evaluate \( \lim_{x \to -3} f(x) \).
3. (1 points each) For the function $g$ whose graph is given, state the value of each quantity, if it exists. If it does not exist, explain why.

(a) \( \lim_{t \to 2^+} g(t) \)

(b) \( \lim_{t \to 0^-} g(t) \)

(c) \( \lim_{t \to 3} g(t) \)

(d) \( g(2) \)