

**“QUIZ” for Sept. 11, 2008**

**NAME:** (print!) \_\_\_\_\_ **Section:** \_\_\_\_\_

**E-MAIL ADDRESS:** (print!) \_\_\_\_\_

1. Assuming that

$$\lim_{x \rightarrow 2} f(x) = 1 \quad , \quad \lim_{x \rightarrow 2} g(x) = -2 \quad , \quad \lim_{x \rightarrow 2} h(x) = 1 \quad ,$$

evaluate the limit

$$\lim_{x \rightarrow 2} 4f(x) - 2g(x) + 3h(x)$$

2. For what value of the constant  $c$  is the function  $f$  continuous for all  $x$ ? Here

$$f(x) = \begin{cases} cx^3 + 3, & \text{if } x \leq -1; \\ cx^2 - 1, & \text{if } x > -1. \end{cases}$$