

You may complete this closed note quiz individually or with a group. If you work with a group, turn in one quiz sheet with everyone's name on it. Please show all relevant work, and mark answers clearly.

1: (5 points) Let $f(x), g(x)$, and $h(x)$ be functions. Suppose that

$$\lim_{x \rightarrow 5} f(x) = -1, \quad \lim_{x \rightarrow 5} g(x) = 4, \quad \lim_{x \rightarrow 5} h(x) = 2.$$

Compute the following limits.

(a) $\lim_{x \rightarrow 5} \sqrt{\frac{[f(x)]^2}{g(x) + 2h(x)}}$

(b) $\lim_{x \rightarrow 5} \left[\frac{2}{f(x)} + \frac{f(x)}{g(x)h(x)} \right]$