

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 101 (151) Sec 01 - Quiz 1

Name:

ID:

Serial No.:

1. Find $\lim_{x \rightarrow -3^+} \frac{x}{\sqrt{x+3}}$

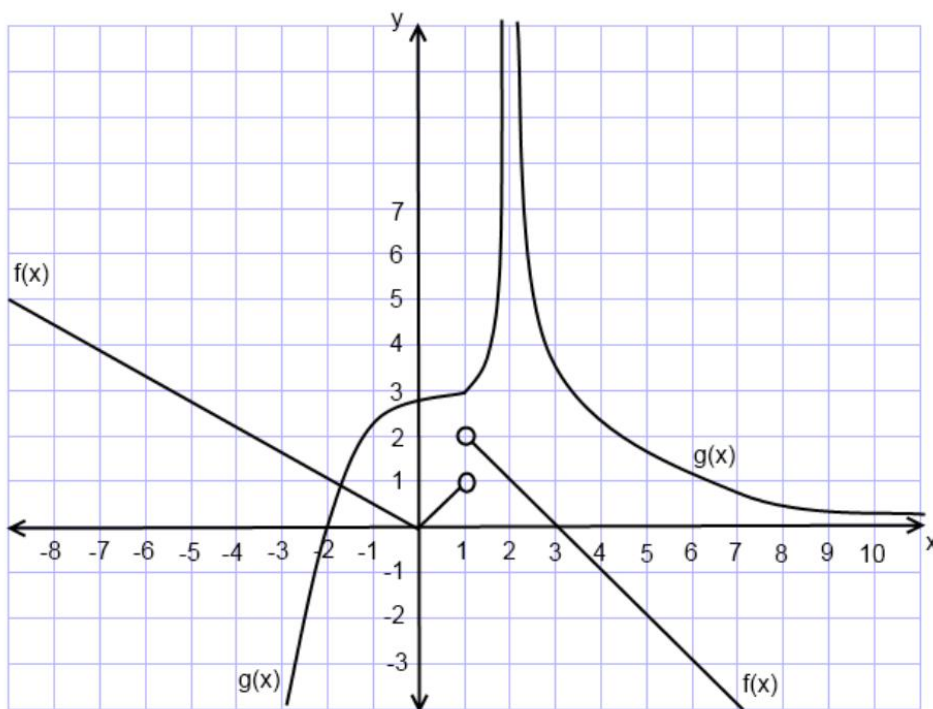
2. $\lim_{x \rightarrow \frac{7}{2}^+} \frac{[2x-5]}{2x-5}$

3. $\lim_{x \rightarrow 2^-} \frac{x^2-4}{|x-2|}$

$$4. \lim_{x \rightarrow 2} \frac{\sqrt{x+7} - 3}{x^3 - 4x}$$

$$5. \lim_{x \rightarrow -2} \frac{\frac{1}{x} + \frac{1}{2}}{x^3 + 8}$$

6. Evaluate the following limits, if they exist. If they do not exist explain why. Use the symbols $+\infty$ or $-\infty$ as appropriate:



- $\lim_{x \rightarrow 1^+} f(x) - g(x)$
- $\lim_{x \rightarrow 1^-} f(x) \times g(x)$
- $\lim_{x \rightarrow 2} \frac{f(x)}{g(x)}$
- $\lim_{x \rightarrow -2} \frac{3f(x) - g(x)}{3 + g(x)} =$