

First Name _____ Last Name _____ Date ____ - ____ - ____ Period ____ Score ____

Find the following limits. Show all your work.

1. $\lim_{x \rightarrow -3} \frac{(x+3)(x-2)}{(x+3)(x^2+4)}$

2. $\lim_{x \rightarrow 2} \frac{\sqrt{x+2} - 2}{x-2}$

3. $\lim_{x \rightarrow -\infty} \frac{4x^3 - x^2 + 4}{2x^3 + x - 6}$

4. $\lim_{x \rightarrow \infty} \frac{-x^5 + 11x^3 - 6x}{x^4 + 2x^2 - 9}$

5. $\lim_{x \rightarrow -\infty} \frac{x^4 + 8x^3 - 3x + 5}{-2x^6 - 2x^5 + 4x^2 - 23}$