

Math 151, Quiz # 5, October 1, 2013

1. Evaluate the following limits:

a) $\lim_{x \rightarrow \infty} \frac{5x^3 - 6x^2 + 1}{4x^3 - 2x + 2}$

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

c) $\lim_{x \rightarrow \infty} \frac{17x^6 - x^4 + x^2 + x + 1}{x^9 - x - 5}$

2. Find the derivative of $(x + 1)(x^2 + 3x - 5)$.