

WRITE YOUR NAME:

MAC 2241 Homework 4
Due in class, Monday September 24th
You can use more paper if necessary, but please STAPLE

Question 1. Evaluate the limit.

$$\lim_{n \rightarrow \infty} \frac{5}{3^n}$$

Question 2. Evaluate the limit.

$$\lim_{n \rightarrow \infty} 1 - (0.2)^n$$

Question 3. Evaluate the limit.

$$\lim_{n \rightarrow \infty} 2^{-n} + 6^{-n}$$

Question 4. Evaluate the limit.

$$\lim_{n \rightarrow \infty} \frac{3^{n+1}}{5^n}$$

Question 5. Evaluate the limit.

$$\lim_{x \rightarrow \infty} \frac{1 - x^2}{x^3 - x + 1}$$

Question 6. Evaluate the limit.

$$\lim_{x \rightarrow \infty} \frac{1 - x - x^2}{2x^2 - 7}$$

Question 7. Evaluate the limit.

$$\lim_{x \rightarrow \infty} \frac{(2x^2 + 1)^2}{(x - 1)^2(x^2 + x)}$$