Use the definition of the limit of a sequence (given before and on p. 574)

To prove the following limits:

0 \lim_{n \to \infty} \frac{2}{n} = 0

1 \lim_{n \to \infty} \frac{6n - 2}{5n - 1} = 3

2 \lim_{n \to \infty} \frac{n^4 - 2n}{n^4 + 4} = 1

3 \lim_{n \to \infty} r^n = 0 \quad \text{if } |r| < 1.

DEF (p. 574)

\[
\lim_{n \to \infty} a_n = L \iff \text{For every } \epsilon > 0 \text{ there is a positive integer } N \text{ such that if } n > N \text{, then } |a_n - L| < \epsilon.
\]