

11. Find the following limits if they exist. If they don't exist, state so.

$$(a) \lim_{n \rightarrow \infty} \frac{n+2}{3n+5}$$

$$(b) \lim_{n \rightarrow \infty} \frac{n^2 - 4n}{16n^2 - 4n}$$

$$(c) \lim_{n \rightarrow \infty} \frac{8n^3 - n^2 + 2}{10n^2 - 5n}$$

$$(d) \lim_{n \rightarrow \infty} \sqrt{\frac{6n - 12}{2n + 6}}$$