

1. Find each of the following limits.

a.  $\lim_{x \rightarrow 3} (x^3 - 2)(7 - x)$

b.  $\lim_{x \rightarrow 2} \frac{x^2 + 3x - 10}{x - 2}$

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

d.  $\lim_{x \rightarrow -2} \frac{x^3 + x^2 + x + 1}{3x^2 + 9x}$