

Exercise page 106: Determine all vertical, horizontal and slant asymptotes.

$$y = \frac{x^3}{4 - x^2}$$

$$y = \frac{x^3 + 1}{x^2 + 3x + 2}$$

$$y = \frac{x^4}{x^3 + 2}$$

$$y = \frac{x^2 + 4x - 2}{x + 1}$$

Practice Makes Perfect 😊

Q49) Evaluate

$$\lim_{x \rightarrow \infty} (\sqrt{4x^2 - 2x + 1} - 2x)$$

Q50) Evaluate

$$\lim_{x \rightarrow \infty} (\sqrt{5x^2 + 4x + 7} - \sqrt{5x^2 + x + 3})$$

Find the value of constant a such that $\lim_{x \rightarrow \infty} \frac{kx^2}{1-2x^2} = 1$

Find the value of constant m such that $\lim_{x \rightarrow \infty} \frac{3x^4 + mx^4 - 2x^3 - 1}{2x^4 + 2x^3 - x} = 1$