

Find the limit of each function

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

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

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

$$4. \lim_{x \rightarrow -\infty} \frac{-x^2 + 2x + 1}{2x^2 - x + 1} =$$

Find the limit of each function

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

$$2. \lim_{x \rightarrow -\infty} \frac{x^2 + 2x + 1}{2x^4 - x + 1} =$$

$$3. \lim_{x \rightarrow \infty} \frac{-x^2 + 2x + 1}{2x^5 - x + 1} =$$

$$4. \lim_{x \rightarrow -\infty} \frac{-x^2 + 2x + 1}{2x^6 - x + 1} =$$

Find the limit of each function

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

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

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$$4. \lim_{x \rightarrow -\infty} \frac{-x^3 + 2x + 1}{2x^2 - x + 1} =$$

$$5. \lim_{x \rightarrow -\infty} \frac{-x^5 + 2x + 1}{2x^2 - x + 1} =$$

$$6. \lim_{x \rightarrow -\infty} \frac{-x^4 + 2x + 1}{2x^2 - x + 1} =$$

Determine the Horizontal Asymptote for each function given below.

$$1. f(x) = \frac{5x^2 + 2x + 1}{2x^2 - x + 1}$$

$$2. f(x) = \frac{-10x^3 + 2x + 1}{2x^3 - x + 1}$$

$$3. f(x) = \frac{3x^3 + 2x + 1}{2x^5 - x + 1}$$

Determine the end behavior power model for each function

$$1. f(x) = \frac{5x^2 + 2x + 1}{2x^2 - x + 1}$$

$$2. f(x) = \frac{-10x^3 + 2x + 1}{2x^3 - x + 1}$$

$$3. f(x) = \frac{3x^3 + 2x + 1}{2x^5 - x + 1}$$