

$$\lim_{x \rightarrow \infty} \int_2^3 \frac{1}{dx} dy$$

## LIMITS INVOLVING INFINITY

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### Problem 1:

Find  $\lim_{x \rightarrow \infty} \frac{3x^3 - x + 1}{6x^3 + 2x^2 - 7}$

### Problem 2:

Find  $\lim_{x \rightarrow \infty} \frac{4x^2}{x^2 - 4x + 3}$

### Problem 3:

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

### Problem 4:

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

### Problem 5:

Find  $\lim_{x \rightarrow \infty} \left( 5 - \frac{4}{x^3} \right)$

### Problem 6:

Find  $\lim_{x \rightarrow \pm \infty} \frac{\sin x}{x}$

## SOLUTIONS

You can find detailed solutions below the link for this problem set!

1. 1/2	2. 4	3. 0
4. Does not exist	5. 5	6. 0

