

What have you learned?

NON-CALCULATOR

$$f(x) = \frac{x^3 - 2x^2 - 15x}{2x^3 + 5x^2 - 3x}$$

1) Find the equations of all asymptotes (horizontal and vertical).

2) Find the x-values of all removable discontinuities.

3) Find $\lim_{x \rightarrow \infty} f(x)$ and $\lim_{x \rightarrow -\infty} f(x)$

4) Find $\lim_{x \rightarrow -3} f(x)$

5) Find $\lim_{x \rightarrow 2} f(x)$

6) Find $\lim_{x \rightarrow \frac{1}{2}^+} f(x)$

7) Find $\lim_{x \rightarrow 0} f(x)$