

Exercise 8

For the function A whose graph is shown, state the following.

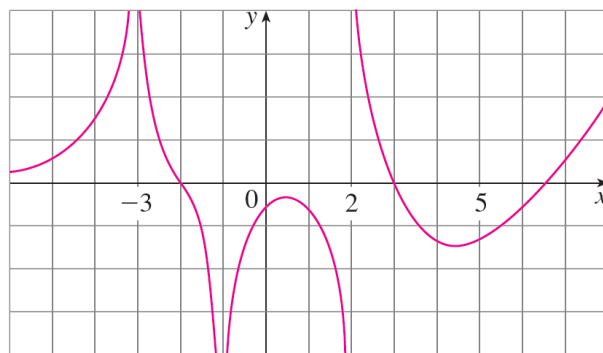
(a) $\lim_{x \rightarrow -3} A(x)$

(b) $\lim_{x \rightarrow 2^-} A(x)$

(c) $\lim_{x \rightarrow 2^+} A(x)$

(d) $\lim_{x \rightarrow -1} A(x)$

(e) The equations of the vertical asymptotes



Solution

$$\lim_{x \rightarrow -3} A(x) = +\infty$$

$$\lim_{x \rightarrow 2^-} A(x) = -\infty$$

$$\lim_{x \rightarrow 2^+} A(x) = +\infty$$

$$\lim_{x \rightarrow -1} A(x) = -\infty$$

Vertical Asymptotes: $x = -3$ and $x = -1$ and $x = 2$.