

1. [2] $\frac{1}{3}; \frac{1}{3}; \infty; \infty$

2. [2] vertical: $4x^2 - 2 = 0$ at $x = \pm \frac{1}{\sqrt{2}}$;

and horizontal: at $\lim_{x \rightarrow \infty} \frac{2x+13}{4x^2-2} = \lim_{x \rightarrow \infty} \frac{2x/x^2+13/x^2}{4x^2/x^2-2/x^2} = \lim_{x \rightarrow \infty} \frac{2/x+13/x^2}{4-2/x^2} = 0$

3. [2] minimum is at zero; maxima are at ± 10