Vertical Asymptote –

The line x=c is a vertical asymptote for a function f, if any of the following condition holds:

1. f approaches ∞ *or* $-\infty$ as x approaches c.
2. f approaches ∞ *or* $-\infty$ as x approaches c from the left.
3. f approaches ∞ *or* $-\infty$ as x approaches c from the right.