

Graphing Rules

Slant Asymptote

- If the degree of the numerator is 1 more than that of the denominator.

Horizontal Asymptotes (HA)

$$y=0$$

- If the degree of the numerator is less than that of the denominator.

No HA

- If the degree of the numerator is more than 1 unit greater than that of the denominator.

$$y = \frac{\text{num}}{\text{denom}}$$

- If the degrees are equal, the asymptote is the ratio of the leading coefficient.

Vertical Asymptote (VA)

- Factor the numerator and denominator, set each factor to equal zero and solve.

Hole

- If a value for x (VA) results in the fraction equalling zero.