

**Find the horizontal asymptote of the graph of each rational function.**

**19.**  $y = \frac{5}{x + 6}$

**20.**  $y = \frac{x + 2}{2x^2 - 4}$

**21.**  $y = \frac{x + 1}{x + 5}$

Horizontal Asymptote:

Horizontal Asymptote:

Horizontal Asymptote:

**22.**  $y = \frac{x^2 + 2}{2x^2 - 1}$

**23.**  $y = \frac{5x^3 + 2x}{2x^5 - 4x^3}$

**24.**  $y = \frac{3x - 4}{4x + 1}$

Horizontal Asymptote:

Horizontal Asymptote:

Horizontal Asymptote:

**Describe the vertical asymptotes and holes for the graph of each rational function.**

**10.**  $y = \frac{3}{x + 2}$

Vertical Asymptote(s):

Hole(s):

**11.**  $y = \frac{x + 5}{x + 5}$

Vertical Asymptote(s):

Hole(s):

**12.**  $y = \frac{x + 3}{(2x + 3)(x - 1)}$

Vertical Asymptote(s):

Hole(s):

**13.**  $y = \frac{(x + 3)(x - 2)}{(x - 2)(x + 1)}$

Vertical Asymptote(s):

Hole(s):

**14.**  $y = \frac{x^2 - 4}{x + 2}$

Vertical Asymptote(s):

Hole(s):

**15.**  $y = \frac{x + 5}{x^2 + 9}$

Vertical Asymptote(s):

Hole(s):