

Identify the domain, all asymptotes, and holes in the graph of each rational function.

1. $y = \frac{4x}{x+2}$

2. $y = \frac{x^2 - 1}{x^2 + 3x + 2}$

3. $y = \frac{x^3 - 2x}{x^2 + 6x}$

Identify the domain, all asymptotes, and holes in the graph of each rational function.

1. $y = \frac{3x}{x-2}$

2. $y = \frac{x^2 - 1}{x^2 - 3x + 2}$

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