

For each rational function find the Horizontal Asymptote, if any, and all x and y intercepts, if any.

1.  $y = \frac{x+5}{x^3 - x^2 - 6x}$

2.  $y = \frac{x^2 + 11x + 24}{x^2 - 4}$

HA:

HA:

x-int:

x-int:

y-int:

y-int:

3.  $y = \frac{4x^2 + 8}{x^2 - 2x - 48}$

4.  $y = \frac{4x^3 + 2x^2 - 30x}{x^2 + 9}$

HA:

HA:

x-int:

x-int:

y-int:

y-int: