Alg 2 Hwk #41 Pts of Disconinuity Fall 2019 Name:

For each problem do the following:

a. State the points of discontinuity, if any.

b. Classify point of discontinuity as either a hole or a vertical asymptote, if any.

1. $y = \frac{5x^2 + 15x}{x^2 - x - 12}$

Pts of Discontinuity:

$x =$

Holes:

$x =$

VA:

$x =$

2. $y = \frac{x^2 - 3x - 10}{x^2 - x - 30}$

Pts of Discontinuity:

$x =$

Holes:

$x =$

VA:

$x =$

3. $y = \frac{2x^3 + 12x^2 - 54x}{7x^2 + 63}$

Pts of Discontinuity:

$x =$

Holes:

$x =$

VA:

$x =$

4. $y = \frac{3x^3 + 9x^2 - 120x}{9x^3 - 81x^2 + 180x}$

Pts of Discontinuity:

$x =$

Holes:

$x =$

VA:

$x =$

5. $y = \frac{5x + 45}{x^3 + 18x^2 + 81x}$

Pts of Discontinuity:

$x =$

Holes:

$x =$

VA:

$x =$