

Name: \_\_\_\_\_

Date: \_\_\_\_\_

PCH: More Practice with Vertical, Horizontal and Oblique Asymptotes

Ms. Loughran

Function	Hole(s)	Vertical Asymptote(s)	Horizontal Asymptote Does graph intersect HA?	Oblique Asymptote Does graph intersect the OA?	x-intercept(s)	y-intercept
$y = \frac{x^2 + x - 2}{x^2 - x - 6}$						
$y = \frac{3}{x - 2}$						
$y = \frac{2x^2}{x^2 - 1}$						
$y = \frac{2x - 1}{x}$						
$y = \frac{x^2 + x - 12}{x^2 - 9}$						
$y = \frac{x^2 - 4}{x + 3}$						

<b>Function</b>	<b>Hole(s)</b>	<b>Vertical Asymptote (s)</b>	<b>Horizontal Asymptote Does graph intersect the HA?</b>	<b>Oblique Asymptote Does graph intersect the OA?</b>	<b>x-intercept(s)</b>	<b>y-intercept</b>
$y = \frac{x^2 - x}{x + 1}$						
$y = \frac{x^2 - x - 2}{x - 1}$						
$y = \frac{x + 1}{x^2 + 3x + 2}$						
$y = \frac{x^2 - 9}{x^2 - 2x - 3}$						
$y = \frac{2x^3 - 17x^2 - 8x - 9}{3 - x^2}$						
$y = \frac{3x^3 - 9x^2 + x - 3}{x - 3}$						