I.

7.2 Graphing Rational Functions DAY TWO CYU

☐ Use when you get it right all by yourself

 $oldsymbol{\mathcal{S}}$ Use when you did it all by yourself, but made a silly mistake

HUse when you could do it alone with a little help from teacher or peer

 ${\it G}$ Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

NUse when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Graphing rational functions		7, 8	3, 4
Understanding transformations		1 - 8	
Vertical asymptote		5 - 8	1 - 4
Horizontal asymptote		5 - 8	1 - 4
Domain & range in interval notation		5 - 8	
Holes	3	4	
Factoring quadratics	3	1, 4	
x-intercepts	1	2	

Identify the holes, vertical asymptotes, x-intercepts, and horizontal asymptote of each.

1. f(x) =	=	1
		$3x^2 + 3x - 18$

Holes:

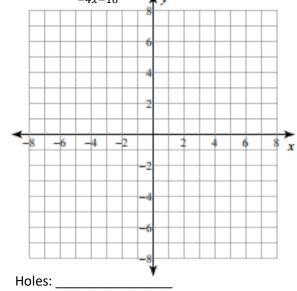
VA: _____x-intercepts: ______

 $2. g(x) = \frac{x-2}{x-4}$

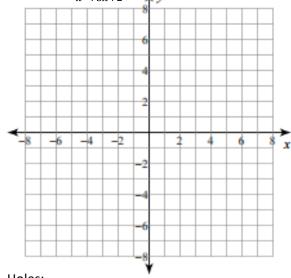
HA: _____

II. Identify the holes, vertical asymptotes, and horizontal asymptote. Then sketch the graph.

 $3. h(x) = \frac{x-4}{-4x-16}$



VA: x-intercepts: HA: _____ $4. j(x) = \frac{2x^2 + 10x + 12}{x^2 + 3x + 2}$



Holes: _____ VA: _____ x-intercepts: _____ HA: _____

III. Identify the vertical asymptotes, horizontal asymptotes, domain and range of each in interval notation.

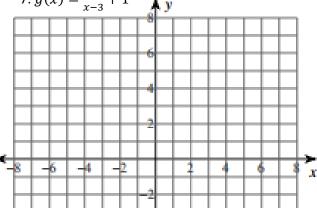
Domain: _____

Range: _____

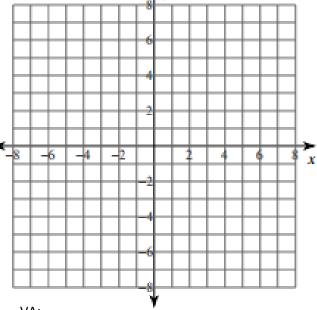
Range: _____

IV. Identify the vertical asymptotes, horizontal asymptote, domain and range of each. Then sketch the graph.

7. $g(x) = \frac{2}{x-3} + 1$



 $8. h(x) = \frac{4}{x} + 2$



VA: _____

HA: _____

Domain: _____ Range: _____ VA: _____

HA: _____ Domain: _____ Range: _____

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

