Name _____ Date _____ Pd ____

7.2 Graphing Rational Functions DAY TWO CYU

| 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	

I.

Identify the holes, vertical asymptotes, x-intercepts, and horizontal asymptote of each.
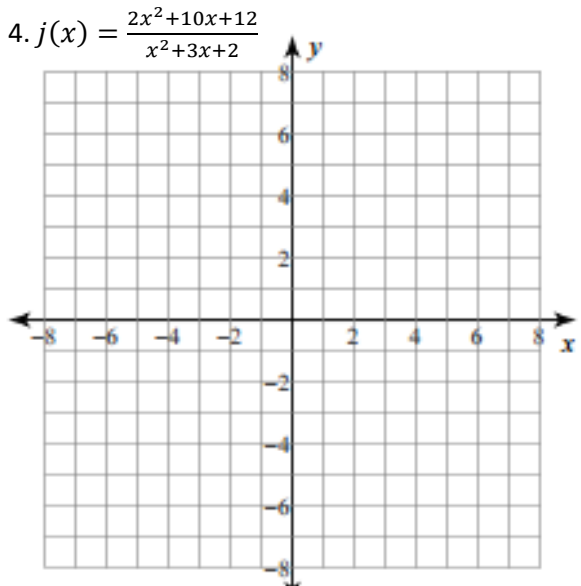
1. $f(x) = \dfrac{1}{3x^2+3x-18}$

Holes: _____

VA: _____

x-intercepts: _____

HA: _____

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

Holes: _____

VA: _____

x-intercepts: _____

HA: _____

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

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

Holes: _____

VA: _____

x-intercepts: _____

HA: _____

4. $j(x) = \dfrac{2x^2+10x+12}{x^2+3x+2}$

Holes: _____

VA: _____
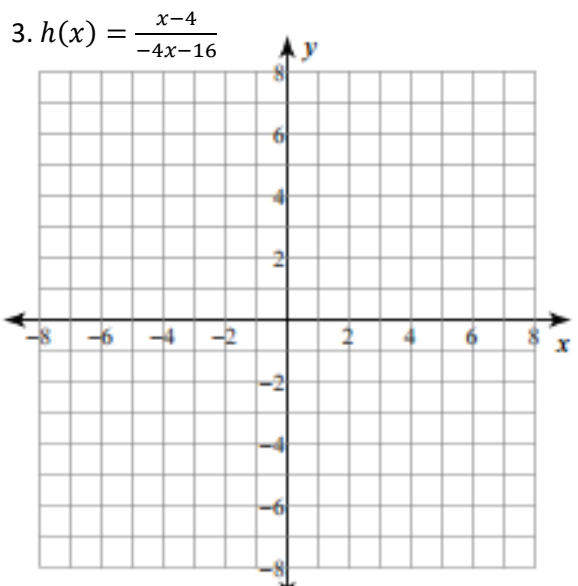
x-intercepts: _____

HA: _____

III. Identify the vertical asymptotes, horizontal asymptotes, domain and range of each in interval notation.
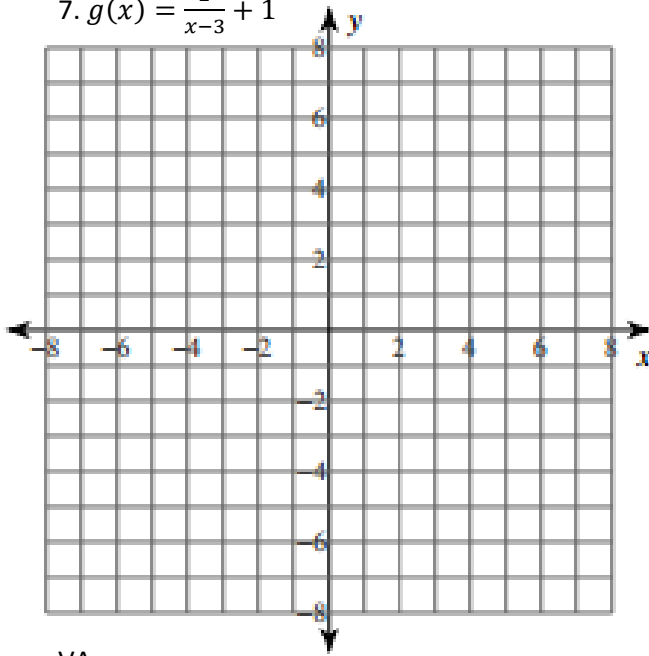
5. $k(x) = \frac{4}{x-1} + 1$

VA: _____

HA: _____

Domain: _____

Range: _____

6. $f(x) = -\frac{3}{x-1} - 1$

VA: _____
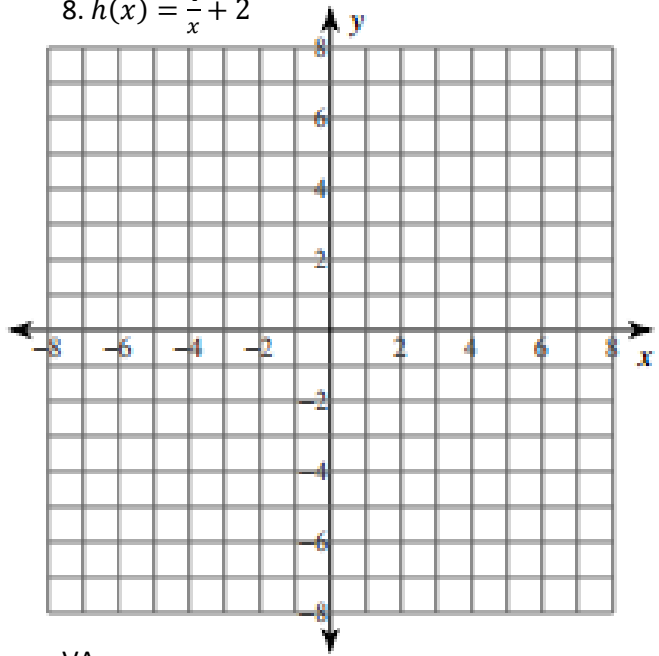
HA: _____

Domain: _____

Range: _____

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

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

VA: _____

HA: _____

Domain: _____

Range: _____

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

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.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Basic   Intermediate   Advanced   Solved ALL!