Name Key Date _____ Pd _____

CYU 1.5.5 Cramer's Rule & Solving Systems with Matrices

☑ *Use when you get it right all by yourself*

S *Use when you did it all by yourself, but made a silly mistake*

H *Use when you could do it alone with a little help from teacher or peer*

G *Use when you completed the problem in a group*

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

N *Use when a question was not even attempted*

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Inverses	1 - 4		
Cramer's Rule			1 - 4

Systems Using Inverses and Cramer's Rule: *Solve each of the following systems both ways. If the answers match you "probably" did it correctly. Still check with a calculator to be sure!*

1. $-2x-5y+4z=21$
   $-5x-5y+z=21$
   $-4y-4z=8$

(-1, -3, 1)

$d_1 = -132$

$d_2 = -396$

$d_3 = 132$

$d = 132$

2. $4x-4y+2z=-14$
   $4x+2y=14$
   $-3y+z=-10$

det = 0

no solution

// ⟷ S

3. $5x + y - 4z = -4$
$-3y - 6z = -21$
$-x - y - z = -6$

$(5, -5, 6)$

$d_1 = 15$

$d_2 = -15$

$d_3 = 18$

$d = 3$

4. $-3z = 6$
$2x + y - 2z = 6$
$-6x - 3y = -6$

$\det = 0$

∞ solutions

$6 = 6$ ✓
always true

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.