Name: Key Date: _____ Period: _____

4.2 Solving Systems of Linear Equations by Substitution CYU

☑ 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
Solving Systems by substitution	1, 3, 4 S	2, 9, 10	6, 7, 8
Checking answer by plugging into original equations	1, 3, 4 S	2, 9, 10	6, 7, 8
Checking answer by using the calculator	1, 3, 4 S	2, 9, 10	6, 7, 8

Solve each system of equations by the substitution method. Show all work for full credit. Check it time allows by plugging your answer back into the original system or using your calculator.

1. $\begin{matrix} 3x - 4y = 10 \\ y = x - 3 \end{matrix}$ $(2, -1)$

2. $\begin{matrix} y = 2x + 9 \\ y = 7x + 10 \end{matrix}$ $\left(-\frac{1}{5}, \frac{43}{5}\right)$

3. $\begin{matrix} x + y = 6 \\ y = -3x \end{matrix}$ $(-3, 9)$

4. $\begin{matrix} y = 3x + 1 \\ 4y = 8x = 12 \end{matrix}$ $(2, 7)$

5. $\begin{aligned} 2x - 5y &= 1 \\ 3x + y &= -7 \end{aligned}$ $(-2, -1)$

6. $\begin{aligned} 4x + 2y &= 5 \\ -2x &= y + 4 \end{aligned}$ $\{\ \}$, $\emptyset$, or no solution

7. $\begin{aligned} 10x - 5y &= -21 \\ x + 3y &= 0 \end{aligned}$ $\left(-\frac{9}{5}, \frac{3}{5}\right)$

8. $\begin{aligned} \frac{1}{4}x - 2y &= 1 \\ x - 8y &= 4 \end{aligned}$ ∞

9. $\begin{aligned} 5x + 10y &= 20 \\ 2x + 6y &= 10 \end{aligned}$ $(2, 1)$

10. $\begin{aligned} x &= \frac{3}{4}y - 1 \\ 8x - 5y &= -6 \end{aligned}$ $\left(\frac{1}{2}, 2\right)$

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 yours elf.