

Name Key

Date _____ Period _____

7.5 Solving Rational Equations 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
State the LCD	1, 4	2	3
Restrict the domain in interval notation	1, 4	2	3
Solve rational equations	1, 4	2	3
Check for extraneous solutions	1, 4	2	3

State your LCD, restrict your domain, solve the equation, and check for extraneous solutions. All work must be shown to earn full credit.

1. $\frac{6}{x^2} - \frac{5}{x} = 1$
 LCD: x^2
 D: $(-\infty, 0) \cup (0, \infty)$

$x = 1, -6$

$1 = 1 \checkmark$

$1 = 1 \checkmark$

2. $\frac{2}{x+2} + \frac{2}{x-4} = 1$
 LCD: $(x+2)(x-4)$
 D: $(-\infty, -2) \cup (-2, 4) \cup (4, \infty)$

$x = 3 \pm \sqrt{13}$

$1 = 1 \checkmark$

$1 = 1 \checkmark$

3. $\frac{1}{x+3} + \frac{1}{x-3} = \frac{6}{x^2-9}$

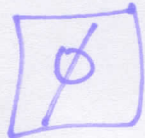
4. $\frac{3}{5x} = \frac{2}{x-7}$

$$3.) \frac{1}{x+3} + \frac{1}{x-3} = \frac{6}{x^2-9}$$

$$\text{LCD: } (x+3)(x-3)$$

$$\text{D: } (-\infty, -3) \cup (-3, 3) \cup (3, \infty)$$

$$x \neq 3$$



$$4.) \frac{3}{5x} = \frac{2}{x-7}$$

$$\text{LCD: } 5x(x-7)$$

$$\text{D: } (-\infty, 0) \cup (0, 7) \cup (7, \infty)$$

$$x = -3$$

$$-0.2 = -0.2 \checkmark$$

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.

