

Key

7.4 Adding & Subtracting Rational Expressions DAY ONE 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
LCD		1 - 3	
Domain restriction in interval notation	1 - 3		
Adding rational expressions		2	
Subtracting rational expressions		1, 3	

Add or subtract the following rational expressions. State your LCD, restrict your domain, and simplify your answer completely.

1.  $\frac{5}{2x-12} - \frac{20}{x^2-4x-12}$

$2(x-6)(x-6)(x+2)$

LCD:  $2(x-6)(x+2)$

D:  $(-\infty, -2) \cup (-2, 6) \cup (6, \infty)$

$$\boxed{\frac{5}{2(x+2)}}$$

2.  $\frac{3}{x^2-5x+6} + \frac{2}{x^2-4}$

$(x-3)(x-2)(x+2)(x-2)$

LCD:  $(x-3)(x-2)(x+2)$

D:  $(-\infty, -2) \cup (-2, 2) \cup (2, 3) \cup (3, \infty)$

$$\boxed{\frac{5x}{(x-3)(x-2)(x+2)}}$$

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

$$(x-1)(x-1) \quad (x+2)(x-1)$$

$$\text{LCD: } (x-1)^2(x+2)$$

$$D: (-\infty, -2) \cup (-2, 1) \cup (1, \infty)$$

$$\frac{-(x^2 - x - 3)}{(x-1)^2(x+2)}$$

**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.

