

7.4 Adding & Subtracting Rational Expressions with Unlike Denominators 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
Stating the LCD	1 - 6	7 - 12	
Restricting the domain	1 - 6	7 - 12	
Adding or Subtracting Rational Expressions	1 - 6	7 - 12	

Perform the indicated operation. Write your LCD, restrict your domain, and show all work for full credit. Simplify completely.

1. $\frac{4}{2x} + \frac{9}{3x}$

LCD: $6x$
 D: $(-\infty, 0) \cup (0, \infty)$

$$\frac{5}{x}$$

2. $\frac{15a}{b} - \frac{6b}{5}$

LCD: $5b$
 D: $(-\infty, 0) \cup (0, \infty)$

$$\frac{3(-2b^2 + 25)}{5b}$$

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

LCD: $2x^2$
 D: $(-\infty, 0) \cup (0, \infty)$

$$\frac{6x + 5}{2x^2}$$

4. $\frac{6}{x+1} + \frac{10}{2x+2}$

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

$$\frac{11}{x+1}$$

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

LCD: $(x+2)(x-2)$
 D: $(-\infty, -2) \cup (-2, 2) \cup (2, \infty)$

$$\frac{(x-6)}{(x+2)(x-2)}$$

6. $\frac{3}{4x} + \frac{8}{x-2}$

LCD: $4x(x-2)$
 D: $(-\infty, 0) \cup (0, 2) \cup (2, \infty)$

$$\frac{35x - 6}{4x(x-2)}$$

7. $\frac{6}{x-3} + \frac{8}{3-x}$

LCD: $-(x-3)$
 D: $(-\infty, 3) \cup (3, \infty)$

$$\frac{2}{-(x-3)}$$

8. $\frac{9}{x-3} + \frac{9}{3-x}$

LCD: $-(x-3)$
 D: $(-\infty, 3) \cup (3, \infty)$

$$0$$

$$9. \frac{-8}{x^2-1} - \frac{7}{1-x^2}$$

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

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

$$\frac{1}{-(x+1)(x-1)}$$

$$10. \frac{5}{x} + 2$$

$$\text{LCD: } x$$

$$D: (-\infty, 0) \cup (0, \infty)$$

$$\frac{2x+5}{x}$$

$$11. \frac{5}{x-2} + 6$$

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

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

$$\frac{6x-7}{x-2}$$

$$12. \frac{y+2}{y+3} - 2$$

$$\text{LCD: } y+3$$

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

$$\frac{-1(y+4)}{y+3}$$

$$13. \frac{-x+2}{x} - \frac{x-6}{4x}$$

$$\text{LCD: } 4x$$

$$D: (-\infty, 0) \cup (0, \infty)$$

$$\frac{-5x+14}{4x}$$

$$14. \frac{5x}{x+2} - \frac{3x-4}{x+2}$$

$$\text{LCD: } x+2$$

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

$$2$$

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.

