

7.3 Adding & Subtracting Rational Expressions with Common 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
Adding rational expressions	1 - 4	7	13, 14
Subtracting rational expressions		5, 6, 8, 9	10 - 12, 15 - 17

Add or subtract as indicated. Simplify the result if possible.

1. $\frac{a+1}{13} + \frac{8}{13}$

$\frac{a+9}{13}$

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

2. $\frac{x+1}{7} + \frac{6}{7}$

$\frac{x+7}{7}$

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

3. $\frac{4m}{3n} + \frac{5m}{3n}$

$\frac{3m}{n}$

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

4. $\frac{3p}{2q} + \frac{11p}{2q}$

$\frac{7p}{q}$

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

5. $\frac{4m}{m-6} - \frac{24}{m-6}$

4

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

6. $\frac{8y}{y-2} - \frac{16}{y-2}$

8

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

7. $\frac{9}{y+9} + \frac{y-5}{y+9}$

$\frac{y+4}{y+9}$

D: $(-\infty, -9) \cup (-9, \infty)$

8. $\frac{5x^2+4x}{x-1} - \frac{6x+3}{x-1}$

$5x+3$

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

9. $\frac{x^2+9x}{x+7} - \frac{4x+14}{x+7}$

$x-2$

D: $(-\infty, -7) \cup (-7, \infty)$

$$10. \frac{4a}{a^2+2a-15} - \frac{12}{a^2+2a-15}$$

$$\frac{4}{a+5}$$

$$D: (-\infty, -5) \cup (-5, 3) \cup (3, \infty)$$

$$11. \frac{3y}{y^2+3y-10} - \frac{6}{y^2+3y-10}$$

$$\frac{3}{y+5}$$

$$D: (-\infty, -5) \cup (-5, 2) \cup (2, \infty)$$

$$12. \frac{2x+3}{x^2-x-30} - \frac{x-2}{x^2-x-30}$$

$$\frac{1}{x-6}$$

$$D: (-\infty, -5) \cup (5, 6) \cup (6, \infty)$$

$$13. \frac{2x+1}{x-3} + \frac{3x+6}{x-3}$$

$$\frac{5x+7}{x-3}$$

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

$$14. \frac{4p-3}{2p+7} + \frac{3p+8}{2p+7}$$

$$\frac{7p+5}{2p+7}$$

$$D: (-\infty, -\frac{7}{2}) \cup (-\frac{7}{2}, \infty)$$

$$15. \frac{2x^2}{x-5} - \frac{25+x^2}{x-5}$$

$$x+5$$

$$D: (-\infty, 5) \cup (5, \infty)$$

$$16. \frac{6x^2}{2x-5} - \frac{25+2x^2}{2x-5}$$

$$2x+5$$

$$D: (-\infty, \frac{5}{2}) \cup (\frac{5}{2}, \infty)$$

$$17. \frac{5x+4}{x-1} - \frac{2x+7}{x-1}$$

$$3$$

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

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.

