Adding & Subtracting Rational Expressions · 1

Subtract: $\frac{4}{x-4} - \frac{6}{x-2}$. Write the answer over the common denominator (x - 4)(x - 2) and give only the numerator.

Adding & Subtracting Rational Expressions · 2

Find the least common denominator of $\frac{7}{x^2-1}$ and $\frac{8}{x-1}$. Write it in factored form.

Adding & Subtracting Rational Expressions · 3

Subtract: $\frac{x}{x-7} - \frac{6}{x-1}$. Write the answer over the common denominator (x - 7)(x - 1) and give only the numerator.

Adding & Subtracting Rational Expressions · 4

Add: $\frac{1}{x} + \frac{6}{x^2}$. Write the answer over the common denominator $x^2$ and give only the numerator.

Adding & Subtracting Rational Expressions · 5

Add: $\frac{3}{x+3} + \frac{2}{x+2}$. Write the answer over the common denominator (x + 3)(x + 2) and give only the numerator.

Adding & Subtracting Rational Expressions · 6

Add: $\frac{3x+6}{x-8} + \frac{3x+3}{x-8}$

Adding & Subtracting Rational Expressions · 7

Subtract: $\frac{4}{x-7} - \frac{7}{x-3}$. Write the answer over the common denominator (x - 7)(x - 3) and give only the numerator.

Adding & Subtracting Rational Expressions · 8

Find the least common denominator of $\frac{2}{x^2+7x-8}$ and $\frac{4}{x+8}$. Write it in factored form.

Adding & Subtracting Rational Expressions · 2

**ANSWER**

$$(x - 1)(x + 1)$$

Adding & Subtracting Rational Expressions · 1

**ANSWER**

$$-2x + 16$$

Adding & Subtracting Rational Expressions · 4

**ANSWER**

$$x + 6$$

Adding & Subtracting Rational Expressions · 3

**ANSWER**

$$x^2 - 7x + 42$$

Adding & Subtracting Rational Expressions · 6

**ANSWER**

$$\frac{6x + 9}{x - 8}$$

Adding & Subtracting Rational Expressions · 5

**ANSWER**

$$5x + 12$$

Adding & Subtracting Rational Expressions · 8

**ANSWER**

$$(x + 8)(x - 1)$$

Adding & Subtracting Rational Expressions · 7

**ANSWER**

$$-3x + 37$$

Add: $\frac{7}{x+6} + \frac{3}{x+4}$. Write the answer over the common denominator $(x + 6)(x + 4)$ and give only the numerator.



Find the least common denominator of $\frac{8}{x^2 - 2x - 35}$ and $\frac{8}{x+5}$. Write it in factored form.



Add: $\frac{x}{x-2} + \frac{4}{x+5}$. Write the answer over the common denominator $(x - 2)(x + 5)$ and give only the numerator.



Add: $\frac{5}{x} + \frac{4}{x^2}$. Write the answer over the common denominator $x^2$ and give only the numerator.



Subtract: $\frac{3}{x-5} - \frac{3}{x-1}$. Write the answer over the common denominator $(x - 5)(x - 1)$ and give only the numerator.



Add: $\frac{x-4}{x-7} + \frac{6x+3}{x-7}$



Subtract: $\frac{1}{x-8} - \frac{5}{x+6}$. Write the answer over the common denominator $(x - 8)(x + 6)$ and give only the numerator.



Find the least common denominator of $\frac{8}{x^2 + 4x - 12}$ and $\frac{9}{x+6}$. Write it in factored form.

Adding & Subtracting Rational Expressions · 10

**ANSWER**

$$(x + 5)(x - 7)$$

Adding & Subtracting Rational Expressions · 9

**ANSWER**

$$10x + 46$$

Adding & Subtracting Rational Expressions · 12

**ANSWER**

$$5x + 4$$

Adding & Subtracting Rational Expressions · 11

**ANSWER**

$$x^2 + 9x - 8$$

Adding & Subtracting Rational Expressions · 14

**ANSWER**

$$\frac{7x - 1}{x - 7}$$

Adding & Subtracting Rational Expressions · 13

**ANSWER**

$$12$$

Adding & Subtracting Rational Expressions · 16

**ANSWER**

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

Adding & Subtracting Rational Expressions · 15

**ANSWER**

$$-4x + 46$$

Add: $\frac{x}{x - 7} + \frac{8}{x - 1}$. Write the answer over the common denominator $(x - 7)(x - 1)$ and give only the numerator.



Add: $\frac{6}{x^2 - 16} + \frac{6}{x - 4}$. Write the answer over the common denominator $(x + 4)(x - 4)$ and give only the numerator.



Add and simplify fully:

$$\frac{4}{x + 4} + \frac{32}{x^2 - 16}$$



Find the least common denominator of $\frac{3}{x^2 - 49}$ and $\frac{4}{x - 7}$. Write it in factored form.



Add: $\frac{1}{x - 4} + \frac{1}{x + 5}$. Write the answer over the common denominator $(x - 4)(x + 5)$ and give only the numerator.



Add: $\frac{2}{x^2 - 36} + \frac{5}{x - 6}$. Write the answer over the common denominator $(x + 6)(x - 6)$ and give only the numerator.



Add and simplify fully:

$$\frac{5}{x + 2} + \frac{20}{x^2 - 4}$$



Add: $\frac{x}{x + 1} + \frac{3}{x - 5}$. Write the answer over the common denominator $(x + 1)(x - 5)$ and give only the numerator.

Adding & Subtracting Rational Expressions · 18

**ANSWER**

$$6x + 30$$

Adding & Subtracting Rational Expressions · 17

**ANSWER**

$$x^2 + 7x - 56$$

Adding & Subtracting Rational Expressions · 20

**ANSWER**

$$(x - 7)(x + 7)$$

Adding & Subtracting Rational Expressions · 19

**ANSWER**

$$\frac{4}{x - 4}$$

Adding & Subtracting Rational Expressions · 22

**ANSWER**

$$5x + 32$$

Adding & Subtracting Rational Expressions · 21

**ANSWER**

$$2x + 1$$

Adding & Subtracting Rational Expressions · 24

**ANSWER**

$$x^2 - 2x + 3$$

Adding & Subtracting Rational Expressions · 23

**ANSWER**

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