

Ex) Find the sum of $\frac{4}{x^2+3x-10} - \frac{-1}{x^2+2x-8}$

① Factor the denominators, if possible, of each fraction to help find the LCD.

② Find the least common denominator (LCD)

For the numbers, make a factor tree of each, find the prime factorization, and make a venn diagram

③ Rewrite each fraction, each with a new denominator being the LCD. To find the new numerator for each fraction. To find the new numerators for each fraction, multiply the original numerator by what you multiplied to that denominator to get the LCD.

④ Combine the fraction by adding or subtracting the numerators and keeping the denominator. (When subtracting, you have to distribute the negative- or subtraction sign- to the entire second numerator)

⑤ Simplify the numerator by combining like terms

⑥ Simplify by factoring the numerator and the denominator to see if anything with cancel out

Ex) Find the sum of $\frac{3}{x^2+8x+7} + \frac{2}{x^2-2x-3}$

① Factor the denominators, if possible, of each fraction to help find the LCD.

② Find the least common denominator (LCD)

For the numbers, make a factor tree of each, find the prime factorization, and make a venn diagram

③ Rewrite each fraction, each with a new denominator being the LCD. To find the new numerator for each fraction. To find the new numerators for each fraction, multiply the original numerator by what you multiplied to that denominator to get the LCD.

④ Combine the fraction by adding or subtracting the numerators and keeping the denominator. (When subtracting, you have to distribute the negative- or subtraction sign- to the entire second numerator)

⑤ Simplify the numerator by combining like terms

⑥ Simplify by factoring the numerator and the denominator to see if anything with cancel out

Ex) Find the sum of $\frac{x+7}{x^2+6x+9} + \frac{x-5}{x^2-5x-24}$

① Factor the denominators, if possible, of each fraction to help find the LCD.

② Find the least common denominator (LCD)

For the numbers, make a factor tree of each, find the prime factorization, and make a venn diagram

③ Rewrite each fraction, each with a new denominator being the LCD. To find the new numerator for each fraction. To find the new numerators for each fraction, multiply the original numerator by what you multiplied to that denominator to get the LCD.

④ Combine the fraction by adding or subtracting the numerators and keeping the denominator. (When subtracting, you have to distribute the negative- or subtraction sign- to the entire second numerator)

⑤ Simplify the numerator by combining like terms

⑥ Simplify by factoring the numerator and the denominator to see if anything with cancel out

Ex) Find the sum of $\frac{5}{x+3} + \frac{2}{x-4}$

① Factor the denominators, if possible, of each fraction to help find the LCD.

② Find the least common denominator (LCD)

For the numbers, make a factor tree of each, find the prime factorization, and make a venn diagram

③ Rewrite each fraction, each with a new denominator being the LCD. To find the new numerator for each fraction. To find the new numerators for each fraction, multiply the original numerator by what you multiplied to that denominator to get the LCD.

④ Combine the fraction by adding or subtracting the numerators and keeping the denominator. (When subtracting, you have to distribute the negative- or subtraction sign- to the entire second numerator)

⑤ Simplify the numerator by combining like terms

⑥ Simplify by factoring the numerator and the denominator to see if anything with cancel out

Ex) Find the difference of $\frac{1}{x^2+5x+6} - \frac{1}{x^2-4}$

① Factor the denominators, if possible, of each fraction to help find the LCD.

② Find the least common denominator (LCD)

For the numbers, make a factor tree of each, find the prime factorization, and make a venn diagram

③ Rewrite each fraction, each with a new denominator being the LCD. To find the new numerator for each fraction. To find the new numerators for each fraction, multiply the original numerator by what you multiplied to that denominator to get the LCD.

④ Combine the fraction by adding or subtracting the numerators and keeping the denominator. (When subtracting, you have to distribute the negative- or subtraction sign- to the entire second numerator)

⑤ Simplify the numerator by combining like terms

⑥ Simplify by factoring the numerator and the denominator to see if anything with cancel out

Ex) Find the difference of $\frac{x+3}{7x} - \frac{3x}{x+4}$

① Factor the denominators, if possible, of each fraction to help find the LCD.

② Find the least common denominator (LCD)

For the numbers, make a factor tree of each, find the prime factorization, and make a venn diagram

③ Rewrite each fraction, each with a new denominator being the LCD. To find the new numerator for each fraction. To find the new numerators for each fraction, multiply the original numerator by what you multiplied to that denominator to get the LCD.

④ Combine the fraction by adding or subtracting the numerators and keeping the denominator. (When subtracting, you have to distribute the negative- or subtraction sign- to the entire second numerator)

⑤ Simplify the numerator by combining like terms

⑥ Simplify by factoring the numerator and the denominator to see if anything with cancel out

Ex) Find the sum of $\frac{x+3}{x^2-8x+15} + \frac{x+6}{x^2-x-20}$

① Factor the denominators, if possible, of each fraction to help find the LCD.

② Find the least common denominator (LCD)

For the numbers, make a factor tree of each, find the prime factorization, and make a venn diagram

③ Rewrite each fraction, each with a new denominator being the LCD. To find the new numerator for each fraction. To find the new numerators for each fraction, multiply the original numerator by what you multiplied to that denominator to get the LCD.

④ Combine the fraction by adding or subtracting the numerators and keeping the denominator. (When subtracting, you have to distribute the negative- or subtraction sign- to the entire second numerator)

⑤ Simplify the numerator by combining like terms

⑥ Simplify by factoring the numerator and the denominator to see if anything with cancel out