Factoring Polynomials Calculator

Factoring Polynomials Calculator is an online tool to find the factors of a polynomial. It makes calculation easy and fun.

If any polynomial in the form of Ax2 + Bx + C then it can easily find the factors of that polynomial.

Steps for Factoring Polynomials

Step 1 :- Observe the values of a, b, and c; a is the coefficient of x2, b is the coefficient of x, and c is the constant.

Step 2 :- Find the discriminant by using the formula (D) = b2 - 4ac.

Step 3 :- If the discriminant is positive(D > 0) , the expression has two real solutions given by. x1 = (−b)+D√2aand x2 =(−b)−D√2a

Know More about Cross Product Calculator

Step 4 :- Factors are (x - x1)(x - x2)

Step 5 :- Now you can write the final answer.

Examples on Factoring Polynomials

Factor x2+3x-4?

Step 1 :- The given equation is x2+3x-4=0.

Step 2 :- So in the above equation, a(coefficient of x2)=1

And b(coefficient of x)=3
And c(constant)=-4.

Step 3 :- So D= b2 - 4ac. D= 32- 4(1)(-4). D= 9 - (-16). D= 25.

Step 4 :- Now D > 0, the equation has two real solutions given by. x1 = (-b)+√D2a. x1 = (-3)+√252×1 = √(−3+5)2. x1 = 1. x2 = (-b)-√D2a. x2 = (-3)-√252×1 = √(−3−5)2. x2 = -4.

Step 5 :- So factors are (x-1)(x+4)

Answer :- (x-1)(x+4)

Learn More about Slope Intercept Form Calculator

Factor x^2+5x=-6 ?

Step 1 :- The given equation x2+5x=-6.

Now add +6 on both the sides.

So x2+5x+6=-6+6.
So x2+5x+6=0.

Step 2 :- Now in the above equation, a(coefficient of x2)=1

b(coefficient of x)=5
c(constant)=6.

Step 3 :- So D= b2 - 4ac. D=52 - 4(1)(6). D=25 - 24. D= 1.

Step 4 :- Since D > 0, the equation has two real solutions given by. x1 = (-b)+√D2a. x1 = (-5)+√12×1= √(−5+1)2. x1 = -2. x2 = (-b)-√D2a. x2 = (-5)-√12×1= √(−5−1)2. x2 = -3.

Step 5 :- So factors are (x+2)(x+3).

Answer :- (x+2)(x+3)

Matrix Multiplication Calculator

Matrix Multiplication Calculator is an online tool to calculate multiplication of two (2 × 2)matrices. It is a tool which makes calculations easy and fun. If two matrices are given then it easily multiply it.

Steps for Matrix Multiplication

Step 1 :- Check the order of the given matrices.

Step 2 :- If A=[a1a3a2a4]
and B= [b1b3b2b4]

Then multiplication A × B =[a1b1+a2b3a3b1+a4b3a1b2+a2b4a3b2+a4b4]

Step 3 :- We multiply 1st row from matrix 1 to 1st column of matrix 2 = |(a1b1 + a2b3)|

Then 1st row of matrix 1 to second column of matrix 2 = |(a1b2 + a2b4)|

The 2nd row of matrix 1 to first column of matrix 2 = |(a3b1 + a4b3)|
The 2nd row of matrix 1 to 2nd column of matrix 2; = |(a3b2 + a4b4)|

Step 4 :- A × B = [a1b1+a2b3a3b1+a4b3a1b2+a2b4a3b2+a4b4]

Examples on Matrix Multiplication

Multiply A = [1236]
and B = [4754]

Step 1 :- Order of the given matrices is (2 × 2).

Step 2 :- A × B = [1236] × [4754]

Step 3 :- A × B = [(1)(4)+(3)(7)(2)(4)+(6)(7)(1)(5)+(3)(4)(2)(5)+(6)(4)]

Step 4 :- A × B = [25501734]

Answer :- A × B = [25501734]

Multiply A = [2347]
and B = [5865]

Read More on Permutation Calculator

Step 1 :- Order of the given matrices is (2 × 2).

Step 2 :- A × B = [2347] × [5865]

Step 3 :- A × B = [(2)(5)+(4)(8)(3)(5)+(7)(8)(2)(6)+(4)(5)(3)(6)+(7)(5)]

Step 4 :- A × B = [42713253]

Answer :- A × B = [42713253]

Thank You

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