

Program Microsoft Small Basic

Równanie kwadratowe

Przykład rozwiązania równania: $x^2 + 5x + 6 = 0$

```
Rownanie kwadratowe: a*x^2 +b*x + c = 0
```

```
Wzory
```

```
Delta = b^2-4ac  
x1=(-b-sqr(Delta))/(2a)  
x2=(-b+sqr(Delta))/(2a)
```

```
Enter a
```

```
1
```

```
Enter b
```

```
5
```

```
Enter c
```

```
6
```

```
Delta = b^2 - 4ac = 1
```

```
x1 = -3
```

```
x2 = -2
```

```
Press any key to continue...
```

Tabulogram programu w Small Basic

```
TextWindow.WriteLine("Rownanie kwadratowe: a*x^2 +b*x + c = 0")
```

```
TextWindow.WriteLine("")
```

```
TextWindow.WriteLine("Wzory")
```

```
TextWindow.WriteLine("Delta = b^2-4ac")
```

```
TextWindow.WriteLine("x1=(-b-sqr(Delta))/(2a)")

TextWindow.WriteLine("x2=(-b+sqr(Delta))/(2a)")

TextWindow.WriteLine("")

TextWindow.WriteLine("Enter a")

a = TextWindow.ReadNumber()

TextWindow.WriteLine("Enter b")

b = TextWindow.ReadNumber()

TextWindow.WriteLine("Enter c")

c = TextWindow.ReadNumber()

'The b^2 - 4ac part of the quadratic formula is called the discriminant

discriminant = (Math.Power(b,2)) - (4*a*c)

TextWindow.WriteLine("")

TextWindow.WriteLine("Delta = b^2 - 4ac =" + discriminant )

If discriminant >= 0 Then

    x1 = (-b + (-1 * Math.SquareRoot(discriminant))) / (2*a)

    x2 = (-b + Math.SquareRoot(discriminant)) / (2*a)

    TextWindow.WriteLine("x1 = " + x1)

    TextWindow.WriteLine("x2 = " + x2)

Else

    TextWindow.WriteLine("The x values are not real, sorry")

EndIf
```