

## Równanie kwadratowe

### 1) Kopia ekranu z obliczeń

```
Rownanie kwadratowe - program w Small Basic
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 3
Enter b 5
Enter c -7

Wyniki obliczeń:

Delta = b^2 - 4ac = 109

x1 = -2,573384418151766666666666666667
x2 = 0,9067177514851

Press any key to continue...
```

### 2) Kod programu

```
' Rownanie kwadratowe - Small Basic
TextWindow.ForegroundColor = "Yellow"
TextWindow.WriteLine("Rownanie kwadratowe - program 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.Write(" Enter a ")
a = TextWindow.ReadNumber()
TextWindow.Write(" Enter b ")
b = TextWindow.ReadNumber()
TextWindow.Write(" 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("Wyniki obliczeń,:")
TextWindow.WriteLine("")
TextWindow.WriteLine("Delta =  $b^2 - 4ac =$ " + discriminant )
TextWindow.WriteLine("")
If discriminant >= 0 Then
    x1 = (-b + (-1 * Math.Sqrt(discriminant))) / (2*a)
    x2 = (-b + Math.Sqrt(discriminant)) / (2*a)
    TextWindow.WriteLine("x1 = " + x1)
    TextWindow.WriteLine("x2 = " + x2)
Else
    TextWindow.WriteLine("The x values are not real, sorry")
EndIf
TextWindow.WriteLine("")
TextWindow.WriteLine("")

```