

```
//Quadratische Gleichung
```

```
#include <iostream>
```

```
#include <math.h>
```

```
int main(int)
```

```
{
```

```
    double a,b,c,x1,x2,x;
```

```
    std::cout << "\n Mit diesem Programm koennen Sie quadratische Gleichungen loesen.";
```

```
    std::cout << "\n a? ";
```

```
    std::cin >> a;
```

```
    std::cout << "\n b? ";
```

```
    std::cin >> b;
```

```
    std::cout << "\n c? ";
```

```
    std::cin >> c;
```

```
    if(a==0)
```

```
    {
```

```
        x=-b/c;
```

```
        std::cout<< "\n x="<<x;
```

```
    }
```

```
    else if (b*b-(4*a*c)>=0)
```

```
    {
```

```
        x1=(-b+sqrt(b*b-4*a*c))/(2*a);
```

```
        x2=(-b-sqrt(b*b-4*a*c))/(2*a);
```

```
        std::cout << "\n x1="<<x1;
```

```
        std::cout << "\n x2="<<x2;
```

```
    }
```

```
    else
```

```
    {
```

```
        std::cout << "\n keine reelle Loesung !!!";
```

```
    }
```

```
    std::cout << "\n\n Bis zum naechsten mal.";
```

```
}
```