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#include <iostream>
#include <cmath>
using namespace std;

bool quadGleich(double a, double b, double c,
                double* x1, double* x2);
void printQuadGleich(double a, double b, double c);

int main()
{
    printQuadGleich(2,-2,-1.5);
    printQuadGleich(1,-6,9);
    printQuadGleich(2,0,2);
}

bool quadGleich(double a, double b, double c,
                double* x1, double* x2)
{
    double d = b*b - 4*a*c;
    if (d < 0)
        return false;
    *x1 = (-b + sqrt(d)) / (2*a);
    *x2 = (-b - sqrt(d)) / (2*a);
    return true;
}

void printQuadGleich(double a, double b, double c)
{
    double x1 = 0.0,
           x2 = 0.0;

    cout << "\nDie quadratische Gleichung:\n\t "
         << a << "*x2 + " << b << "*x + " << c << " = 0"
         << endl;
    if( quadGleich(a, b, c, &x1, &x2))
    {
        cout << "besitzt die reellen Lösungen:"
             << "\n\t x1 = " << x1
             << "\n\t x2 = " << x2 << endl;
    } else
        cout << "besitzt keine reelle Lösung!" << endl;
}

```