LAB EXERCISE

Quadratic

Assignment:

1. Write a program to **input the coefficients of** a, b, and c for a quadratic equation. Remember that a quadratic equation can be summarized in the form:

    $$ax^2 + bx + c = 0$$

    The program should compute the two roots for the equation.

    $$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

2. Your two answers should be printed out to 4 decimal places, $\pm$ 0.0001.

3. You do not have to error-trap for a negative determinate situation (if b^2 - $4ac < 0$). All the test input coefficients will result in real-number answers.

Instructions:

1. Write your program, test it, and then run these 3 sample inputs:

    $$x^2 - x - 6 = 0 \qquad\qquad x^2 + \frac{1}{8}x - \frac{1}{32} = 0 \qquad\qquad -2x^2 + 5x + 17 = 0$$

2. Here are decimal equivalencies to use for inputs to the middle problem:

    $$\frac{1}{8} = 0.125 \quad ; \quad -\frac{1}{32} = -0.03125$$

3. Call over your instructor for scoring.