

1. How you will find roots of a quadratic equation?

Ans. Step 1 \rightarrow The general form of a quadratic equation is $ax^2 + bx + c = 0$.

Step 2 \rightarrow The find the root $x = (-b \pm \sqrt{b^2 - 4ac})/2a$

Step 3 \rightarrow Finding the discriminant,
 $k = b^2 - 4ac$.

Step 4 \rightarrow checking if $k > 0$,
root 1 = $(-b + \sqrt{k})/2a$
root 2 = $(-b - \sqrt{k})/2a$

Step 5 \rightarrow checking if $k = 0$,
root 1 = root 2 = $(-b)/2a$

Step 6 \rightarrow checking if $k < 0$,
root 1 = $(-b + i\sqrt{k})/2a$
root 2 = $(-b - i\sqrt{k})/2a$

2. How you will display a multiplication table for number 5.

Ans. Step 1 \rightarrow Assuming 5 as the number to find the multiplication table.

Step 2 \rightarrow Assuming 10 as the end number.

Step 3 \rightarrow set a variable $i = 1$.

Step 4 \rightarrow Print the value " $5 \times i = 5i$ ".

Step 5 \rightarrow Adding the variable i with 1.
 $i = i + 1$.

Step 6 \rightarrow continue [step 4].

Step 7 \rightarrow Repeat [step 5] until i becomes 10, ~~$i \leftarrow 0$~~ $i = 10$.

Step 8 \rightarrow Repeat [step 6] till [step 7] stops.