

Question:

Solve: $2x^2 - 5x + 3 = 0$

Solution:**Step1:**

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

$$a = 2, b = -5, c = 3$$

Step 2:

Discriminant:

$$D = b^2 - 4ac$$

$$D = (-5)^2 - 4(2)(3)$$

$$D = 25 - 24 = 1$$

Step 3:

Roots formula:

$$x = (-b \pm \sqrt{D}) / 2a$$

Step 4:

Substituting:

$$x = (5 \pm 1) / 4$$

Step 5:

Roots:

$$x = 6/4 = 3/2$$

$$x = 4/4 = 1$$

Final Answer: $x = 3/2$ and
 $x = 1$