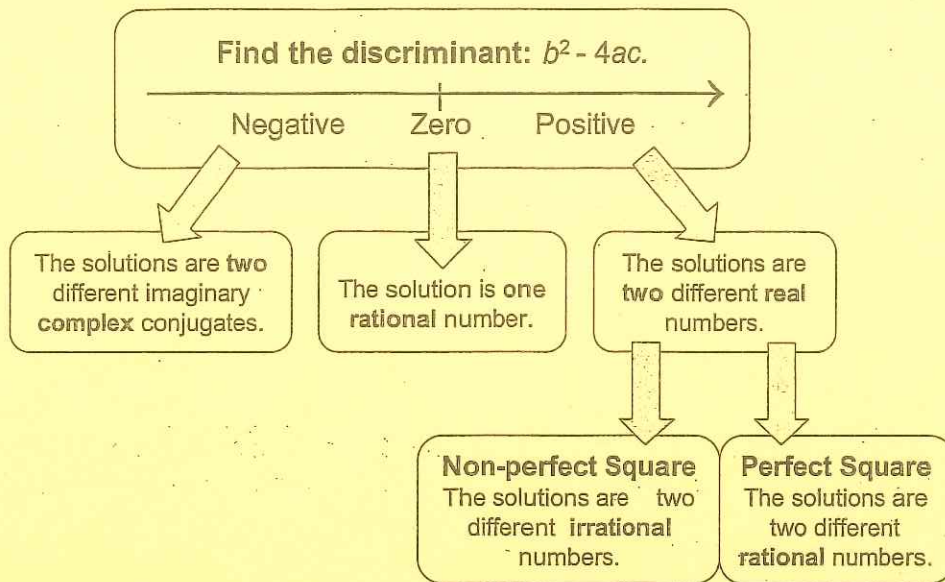


Student Activity

Match Up on the Discriminant



Directions: In each box, find the discriminant and then classify it.

- A** Two different rational numbers **B** Two different irrational numbers **C** One rational number **D** Two different imaginary numbers

| | | |
|---------------------------------------------------------------------|---------------------------|--------------------|
| $25x^2 - 40x + 16 = 0$ $d = (-40)^2 - 4(25)(16) = 0$ C | $3x^2 + 14x - 24 = 0$ | $x^2 - 2x + 2 = 0$ |
| $9x^2 = 4$ | $6x^2 - 3 = 0$ | $x^2 + 3 = 5x$ |
| $5(5x^2 + 2x) = -1$ | $2x^2 + 3x = -3$ | $3x^2 + 11x = 5$ |
| $45x^2 + 24 = 67x$ | $144x^2 - 264x + 121 = 0$ | $4x^2 + 36x = -81$ |