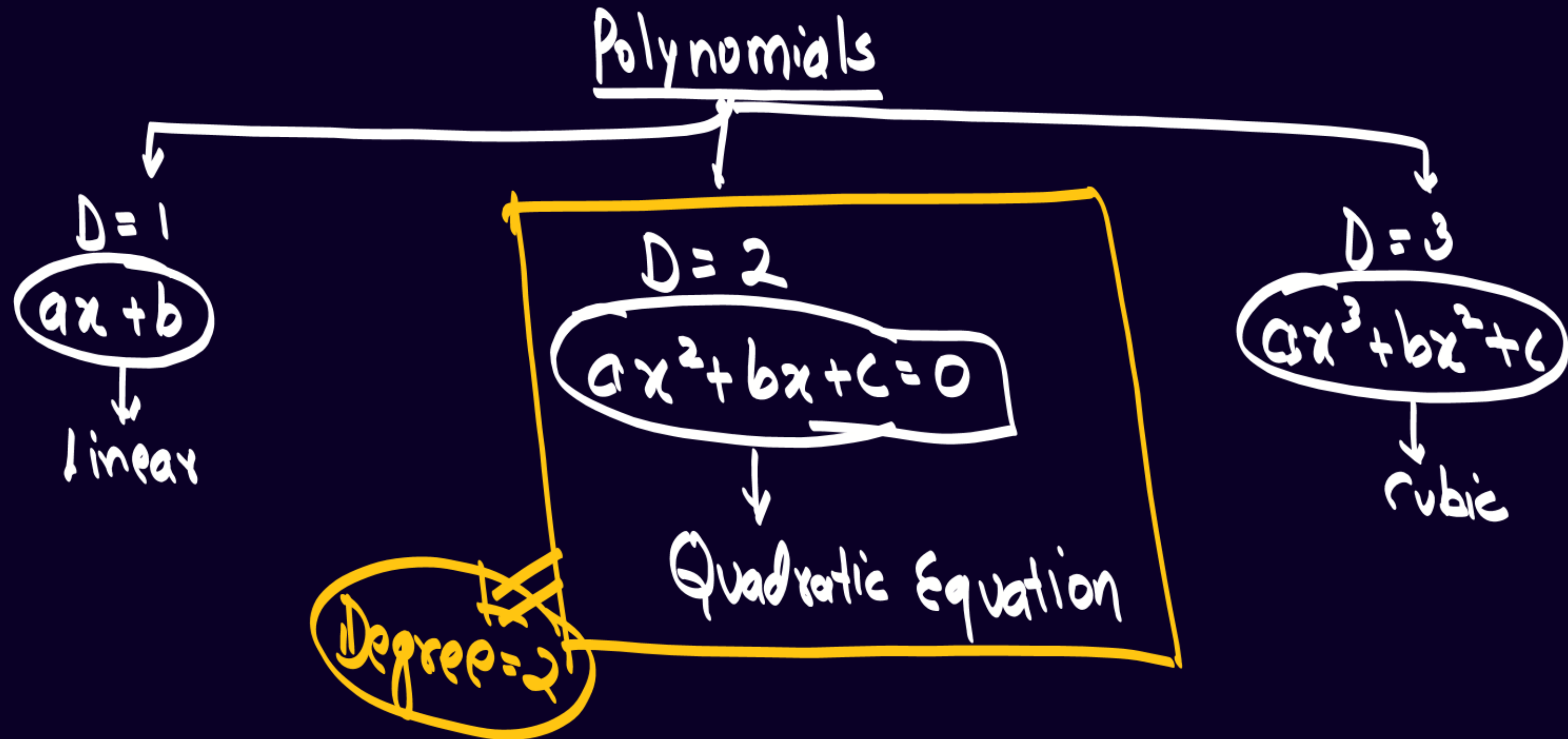


[Aim: 100/100 in Maths]

QUADRATIC EQUATION



Q11:- Quadratic or not??

(i) $x^2 + 2x + 1 = (4-x)^2 + 3$

$$\cancel{x^2} + 2x + 1 = 16 + \cancel{x^2} - 8x + 3$$

$$10x = 18$$

$$\boxed{10x - 18 = 0}$$

$$\times D=1$$

(ii) $x^3 - x^2 = (x-1)^3$

$$(a-b)^3 = a^3 - b^3 - 3ab(a-b)$$

$$\cancel{x^3} - x^2 = \cancel{x^3} - 1^3 - 3x(1)(x-1)$$

$$-x^2 = -1 - 3x^2 + 3x$$

$$\boxed{2x^2 - 3x + 1 = 0} \quad D=2 \checkmark \checkmark$$

(iii) $(2x-1)(x-3) = (x+5)(x-1)$

$$\underline{2x^2} - \underline{6x} - \underline{x} + 3 = \underline{x^2} - \underline{x} + \underline{5x} - 5$$

$$\boxed{x^2 - 11x + 8 = 0}$$

$$D=2 \checkmark$$

SOLUTION OF QUAD EQ

Factorisation
(Splitting the Middle term)

Discrimination Method