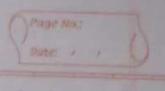
Formula Sheet Pair of Straight Line.



· Combined egn:-Let. u=0 V=0

.: Combined eqn: UV = 0

· Homogeneous eqn of degree two:

1] Combined ean of degree 2 - ax2 + 2hxy + by2=0

27 h2-ab >0 - Distinct Lines

h²-ab = 0 → coincidence Lines

h²-ab<0 → Not represent Line.

3] M. and m2 are slopes of two given lines,

: m,+m2 = -2h m,m2 = a

· Short tricks:-

1] Combine ean of pair of line passing through origin and ler to ax2+2hxy +by2=0 : bx2 - 2hxy + ay2=0.

2] IF diff. bet slopes of lines represented by ax2+2hxy+by2 is k then,

4(h2-ab)=k2b2.

- 3) IF slope of one line is k times other then,

 (k+1)2 ab = 4kh2
- · Auxillary equation: bm2 + 2 hm + a = 0

• Acute angle between lines:
tano= |25h^2-ab|

a+b

Lines perpendicular - a+b=0 Lines coincident - h2-ab=0

General second degree eqn in x and y:
ax2 + 2hxy + by2 + 2gx + 2fy + c = 0.

Ean represent pair of line:

17 abc + 2fgh - af2- bg2-ch2=0

2] h2-ab 20

3) This are parallel to ax2+2hxy+by2=0.

4] perpendicular -> a+b = 0

5] parallel → h2-ab=0

6] point of intersection → (hF-bg, gh-af)

7] Joint eqn of bisector of angle: →
hx2-(a-b)xy-hy2=0

•	a	h	9	all	happy	oirls
	h	Ь	f	having	beautiful	faces
	19	F	С	going	For	cinema