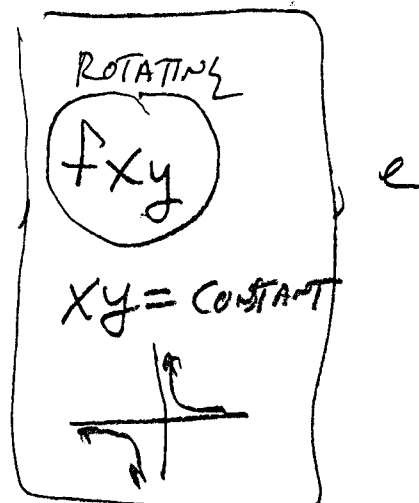


(X, y)

$$ax^2, by^2, cx, dy, e$$



degenerate cases ax, by, e

similar
Frame

POLY $\rightarrow$

$a \oplus$
parabola

$a \ominus$

$$ax^2 + bx + c = y \quad \text{function}$$
$$a(x-h)^2 + k = y \quad \text{h, k form}$$

$a \oplus$

$a \ominus$

$$ay^2 + by + c = x \quad \text{NOT A FUNCTION}$$
$$a(y-k)^2 + h = x \quad \text{h, k form}$$

Mth 112

Weds. 10-24-12

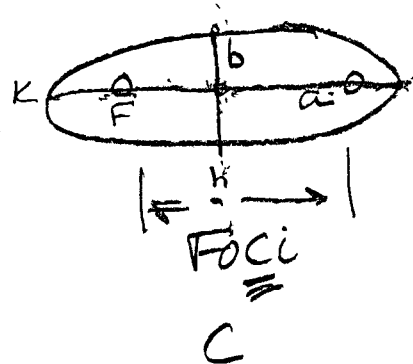
CLASS
NOTES

$$ax^2 + ay^2 + bx + cy + d = 0$$

$$(x-h)^2 + (y-k)^2 = r^2$$

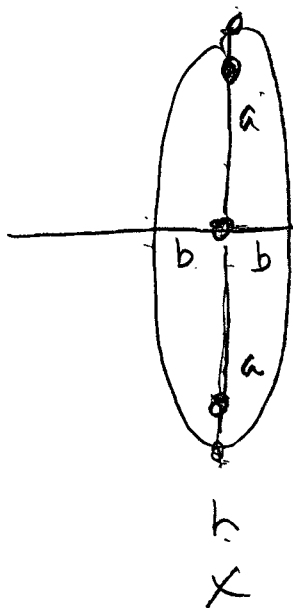
$M(h, k)$

$$ax^2 + by^2 + cx + dy + e = 0$$



$$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$$

$$c^2 = a^2 - b^2$$



$$\frac{(x-h)^2}{b^2} + \frac{(y-k)^2}{a^2} = 1$$

$$c^2 = a^2 - b^2$$