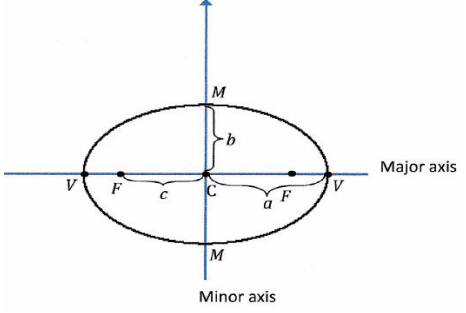
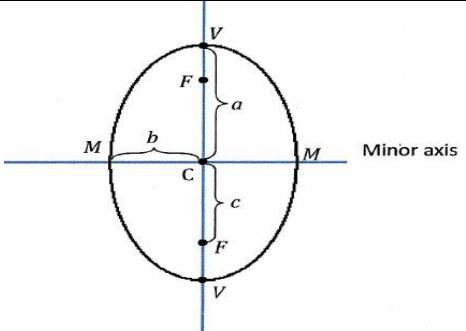
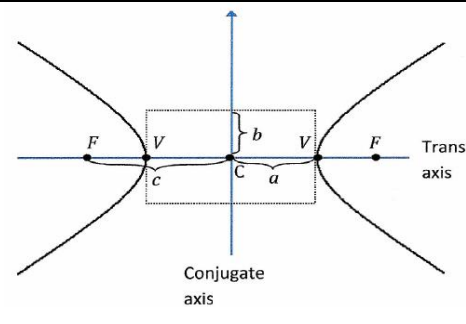
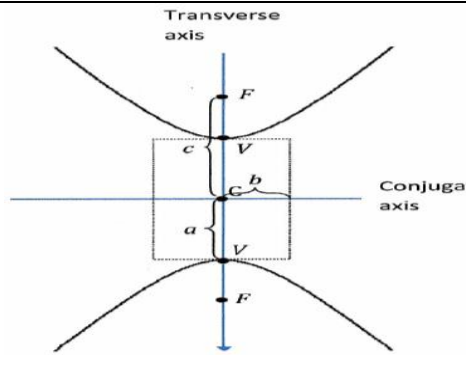


<u>PARABOLA</u>	Equation	Vertex	Focus	Directrix	p and a
	$x = a(y - k)^2 + h$ <p style="text-align: center;">OR</p> $(y - k)^2 = 4p(x - h)$	(h, k)	$(h + p, k)$	$x = h - p$	$p = \frac{1}{4a}, a = \frac{1}{4p}$
	$y = a(x - h)^2 + k$ <p style="text-align: center;">OR</p> $(x - h)^2 = 4p(y - k)$	(h, k)	$(h, k + p)$	$y = k - p$	$p = \frac{1}{4a}, a = \frac{1}{4p}$

<u>CIRCLE</u>	Equation	Center	Radius
	$(x - h)^2 + (y - k)^2 = r^2$	(h, k)	r

<u>Ellipse</u>	Equation	Center	Foci	Vertices
	$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$ $a^2 > b^2 \text{ and } c^2 = a^2 - b^2$	(h, k)	$(h - c, k)$ $(h + c, k)$	$(h - a, k)$ $(h + a, k)$
	$\frac{(x-h)^2}{b^2} + \frac{(y-k)^2}{a^2} = 1$ $a^2 > b^2 \text{ and } c^2 = a^2 - b^2$	(h, k)	$(h, k - c)$ $(h, k + c)$	$(h, k - a)$ $(h, k + a)$
<u>Hyperbola</u>	Equation	Center	Foci	Vertices
	$\frac{(x-h)^2}{a^2} - \frac{(y-k)^2}{b^2} = 1$ $c^2 = a^2 + b^2$	(h, k)	$(h - c, k)$ $(h + c, k)$	$(h - a, k)$ $(h + a, k)$
	$\frac{(y-k)^2}{a^2} - \frac{(x-h)^2}{b^2} = 1$ $c^2 = a^2 + b^2$	(h, k)	$(h, k - c)$ $(h, k + c)$	$(h, k - a)$ $(h, k + a)$