Vertices	$(\pm a, 0)$	$(0, \pm a)$	$(\alpha \pm a, \beta)$	$(\alpha, \beta \pm a)$
Foci	$(\pm ae, 0)$	$(0, \pm ae)$	$(\alpha \pm ae, \beta)$	$(\alpha, \beta \pm ae)$
Eccentricity (e)	$e = \sqrt{1 - \frac{b^2}{a^2}}$	$e = \sqrt{1 - \frac{b^2}{a^2}}$	$e = \sqrt{1 - \frac{b^2}{a^2}}$	$e = \sqrt{1 - \frac{b^2}{a^2}}$
Length of Latus Rectum	$\frac{2b^2}{a}$	$\frac{2b^2}{a}$	$\frac{2b^2}{a}$	$\frac{2b^2}{a}$
Length of Major axis	$2a$	$2a$	$2a$	$2a$
Length of Minor axis	$2b$	$2b$	$2b$	$2b$
Equation of Major axis	$y = 0$	$x = 0$	$y = \beta$	$x = \alpha$
Equation of Minor axis	$x = 0$	$y = 0$	$x = \alpha$	$y = \beta$
Equation of the Directrix	$x \pm \frac{a}{e} = 0$	$y \pm \frac{a}{e} = 0$	$x \pm \frac{a}{e} = \alpha$	$y \pm \frac{a}{e} = \beta$
Vertices of Latus Rectum	$\left(ae, \pm \frac{b^2}{a}\right)$ $\left(-ae, \pm \frac{b^2}{a}\right)$	$\left(\pm \frac{b^2}{a}, ae\right)$ $\left(\pm \frac{b^2}{a}, -ae\right)$	$\left(\alpha + ae, \beta \pm \frac{b^2}{a}\right)$ $\left(\alpha - ae, \beta \pm \frac{b^2}{a}\right)$	$\left(\alpha \pm \frac{b^2}{a}, \beta + ae\right)$ $\left(\alpha \pm \frac{b^2}{a}, \beta - ae\right)$
Parametric	$(a\cos\theta, b\sin\theta)$ $-\pi < \theta \leq \pi$	$(b\cos\theta, a\sin\theta)$ $-\pi < \theta \leq \pi$	$(\alpha + a\cos\theta, \beta + b\sin\theta)$ $-\pi < \theta \leq \pi$	$(\alpha + b\cos\theta, \beta + a\sin\theta)$ $-\pi < \theta \leq \pi$

Hyperbola

Form	$\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$	$\frac{y^2}{a^2} - \frac{x^2}{b^2} = 1$	$\frac{(x-\alpha)^2}{a^2} - \frac{(y-\beta)^2}{b^2} = 1$
Centre	$(0,0)$	$(0,0)$	(α, β)
Vertices	$(\pm a, 0)$	$(0, \pm a)$	$(\alpha \pm a, \beta)$
Foci	$(\pm ae, 0)$	$(0, \pm ae)$	$(\alpha \pm ae, \beta)$
Eccentricity (e)	$e = \sqrt{1 + \frac{b^2}{a^2}}$	$e = \sqrt{1 + \frac{b^2}{a^2}}$	$e = \sqrt{1 + \frac{b^2}{a^2}}$
Length of Latus Rectum	$\frac{2b^2}{a}$	$\frac{2b^2}{a}$	$\frac{2b^2}{a}$
Length of Transverse axis	$2a$	$2a$	$2a$
Length of Conjugate axis	$2b$	$2b$	$2b$
Equation of Transverse axis	$y = 0$	$x = 0$	$y = \beta$
Equation of Conjugate axis	$x = 0$	$y = 0$	$x = \alpha$
Equation of Directrix	$x \pm \frac{a}{e} = 0$	$y \pm \frac{a}{e} = 0$	$x \pm \frac{a}{e} = \alpha$
Vertices of Latus Rectum	$\left(ae, \pm \frac{b^2}{a}\right)$	$\left(\pm \frac{b^2}{a}, ae\right)$	$\left(\alpha + ae, \beta \pm \frac{b^2}{a}\right)$