

{FREEBIE!}

CIRCLE

Radius, r

ELLIPSE

Co-Vertex, Vertex, Focus, a , c

HYPERBOLA

Asymptotes, Co-Vertex, Focus, Vertex, Center (h, k) , a , b , c

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

FORMULA FOR c : $c^2 = a^2 + b^2$

PARABOLA

Axis of Symmetry, Focus, Vertex (h, k) , p , Directrix

$$(x-h)^2 = 4p(y-k)$$

Opens UP if $p > 0$
Opens DOWN if $p < 0$

$$(y-k)^2 = 4p(x-h)$$

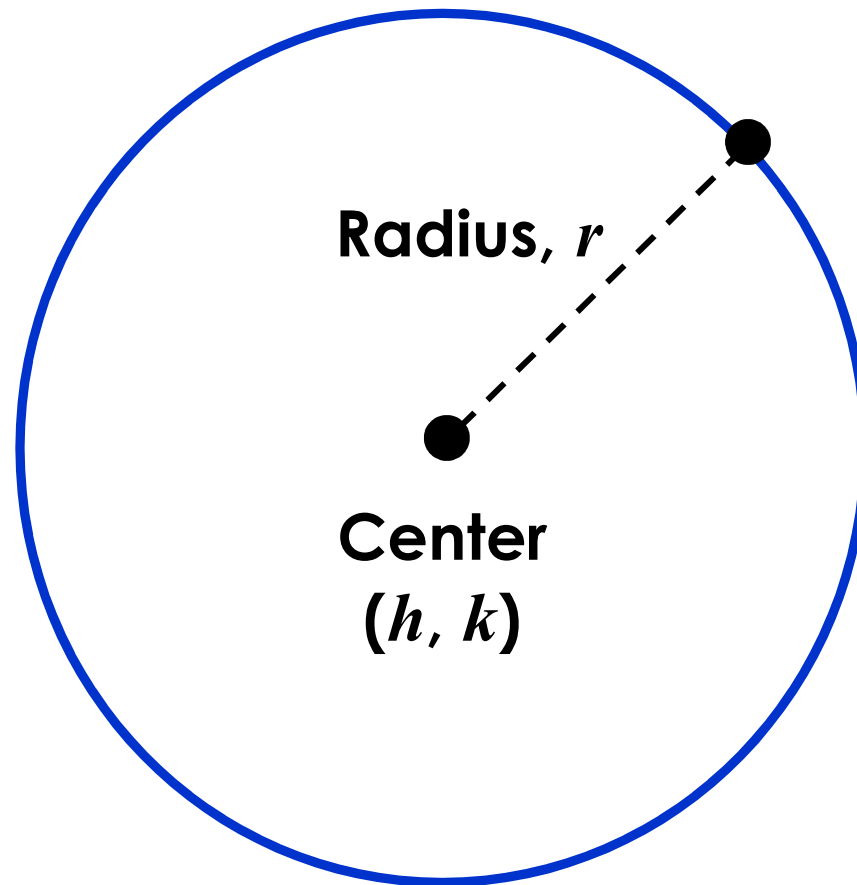
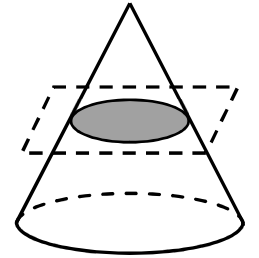
Opens RIGHT if $p > 0$
Opens LEFT if $p < 0$

CONIC SECTIONS

WALL POSTERS

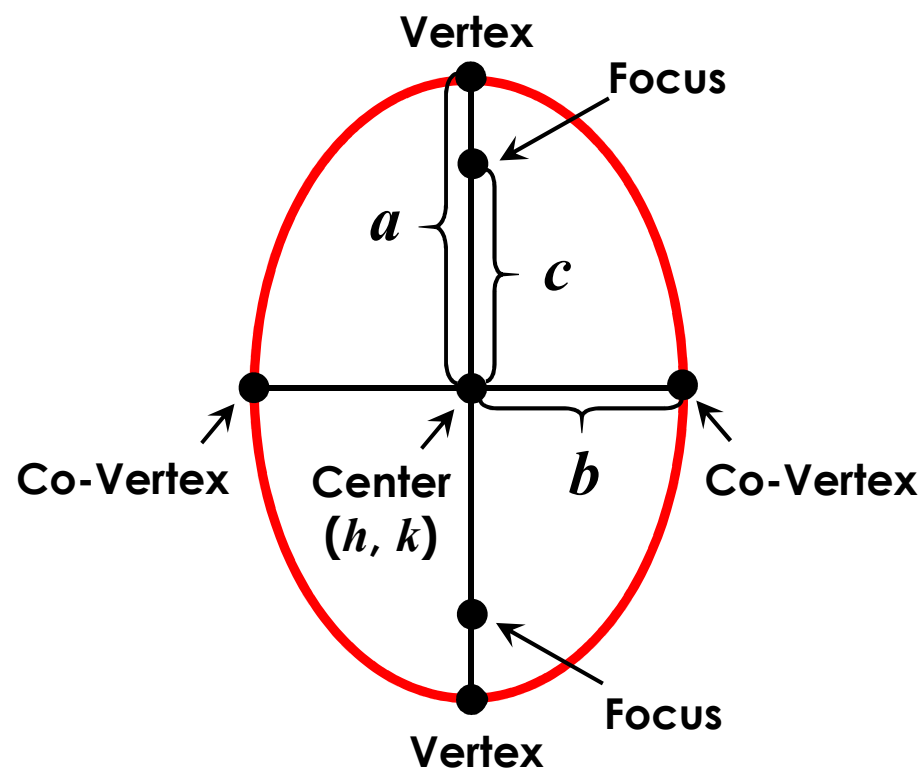
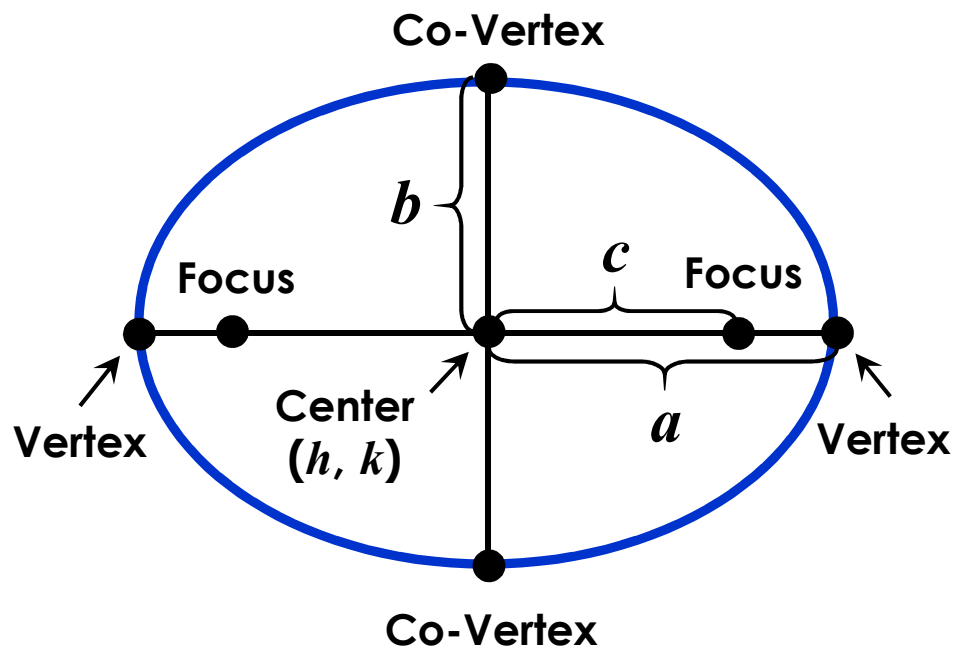
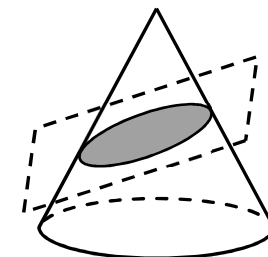
Created by: ALL THINGS ALGEBRA

CIRCLE



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

ELLIPSE

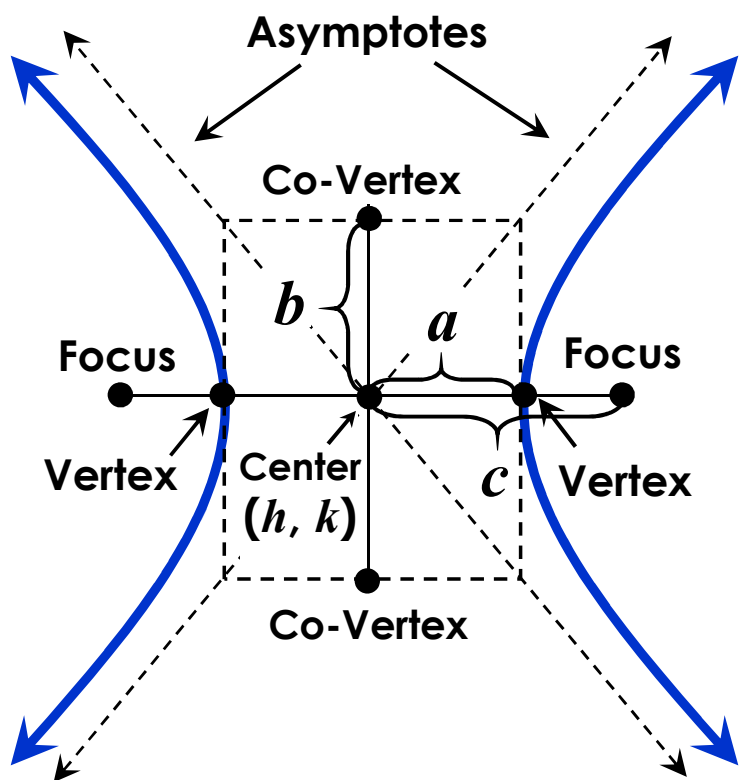
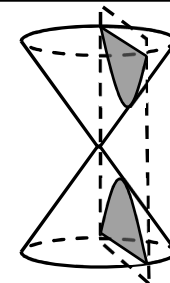


$$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$$

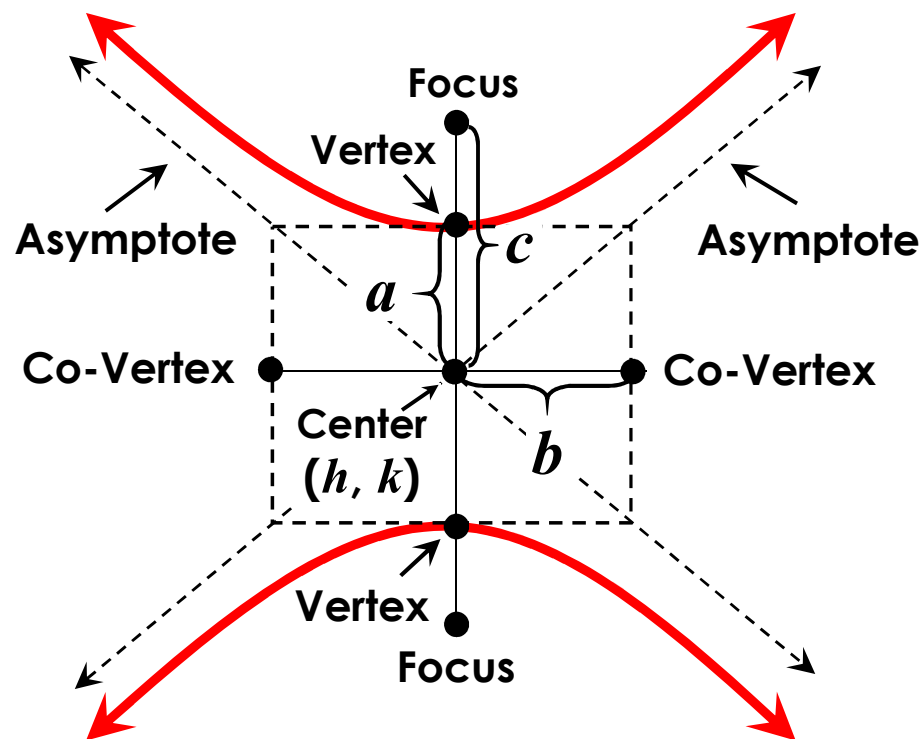
$$\frac{(x-h)^2}{b^2} + \frac{(y-k)^2}{a^2} = 1$$

$$\text{FORMULA FOR } c: c^2 = a^2 - b^2$$

HYPERBOLA



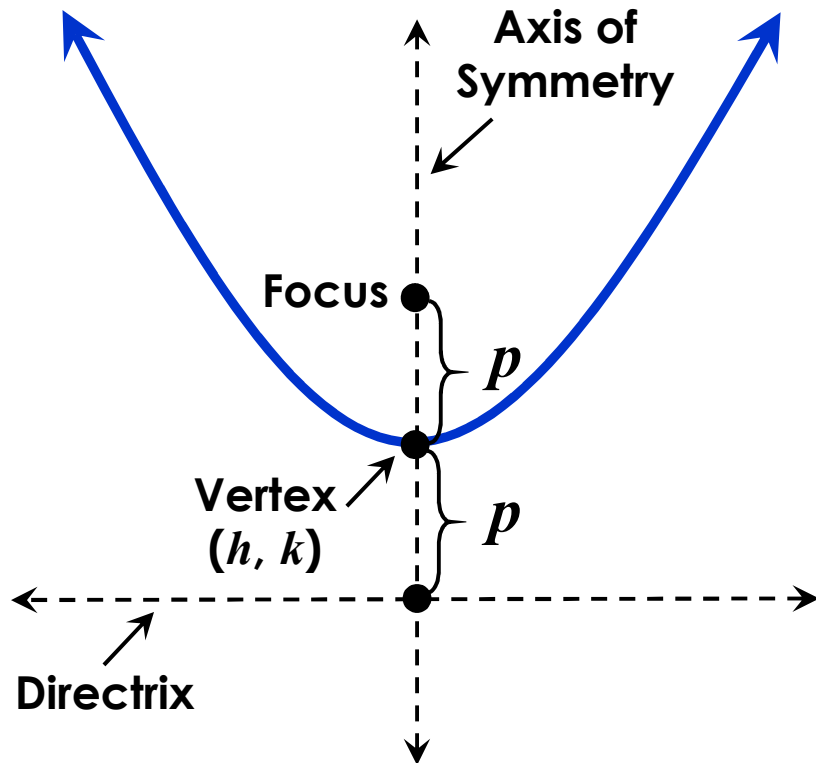
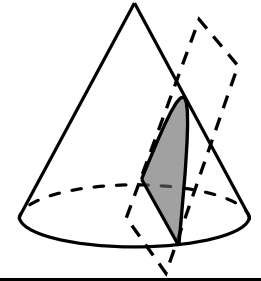
$$\frac{(x-h)^2}{a^2} - \frac{(y-k)^2}{b^2} = 1$$



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

FORMULA FOR C: $c^2 = a^2 + b^2$

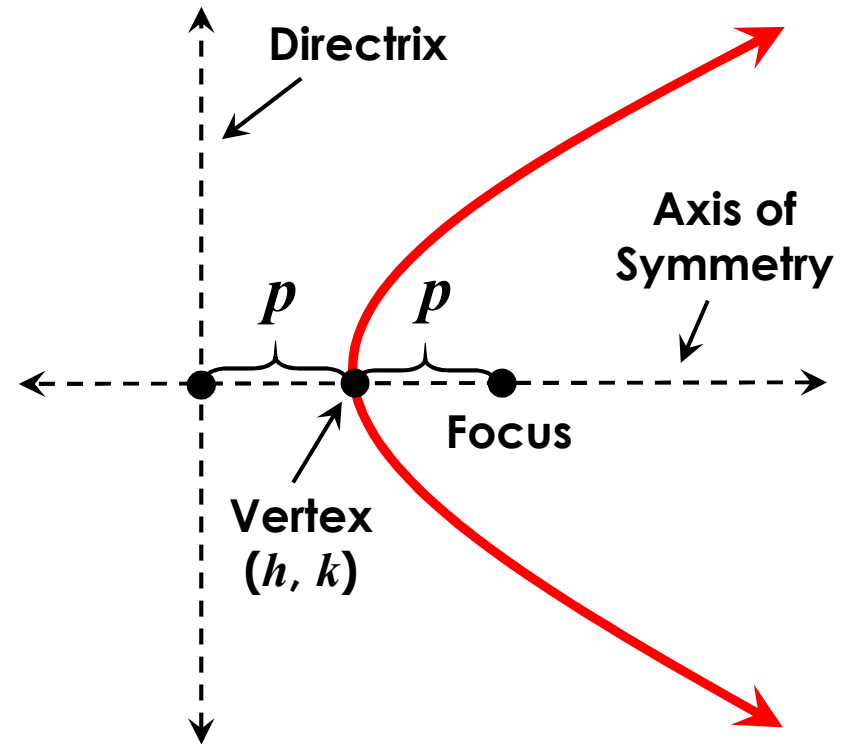
PARABOLA



$$(x - h)^2 = 4p(y - k)$$

Opens UP if $p > 0$

Opens DOWN if $p < 0$

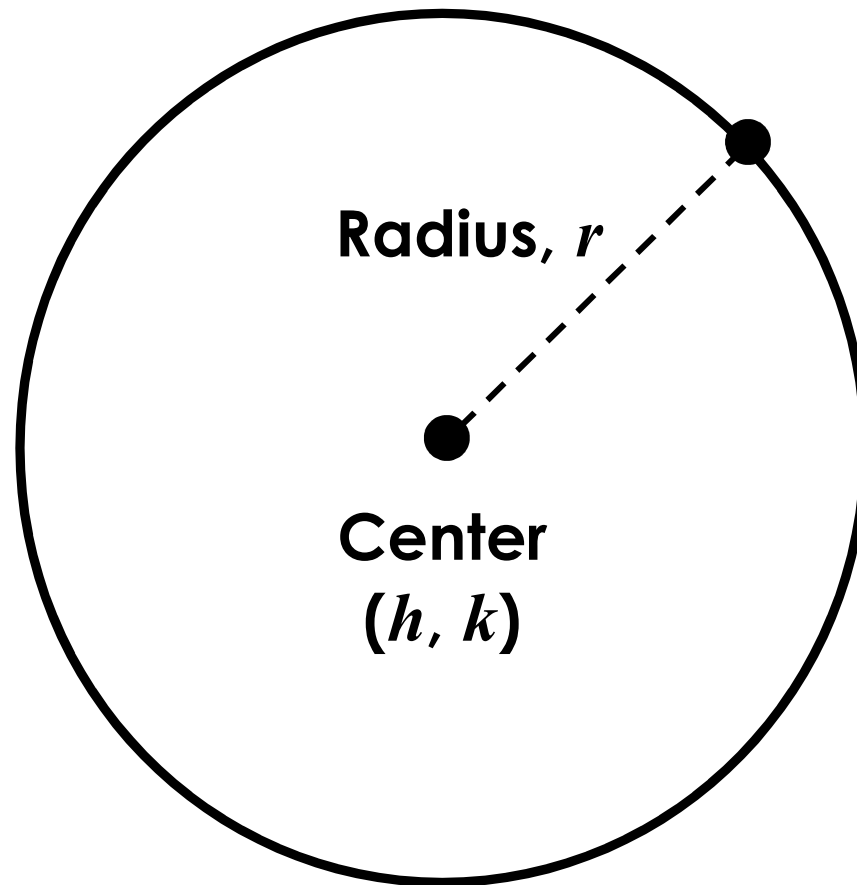
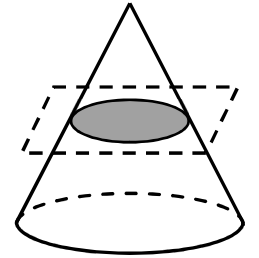


$$(y - k)^2 = 4p(x - h)$$

Opens RIGHT if $p > 0$

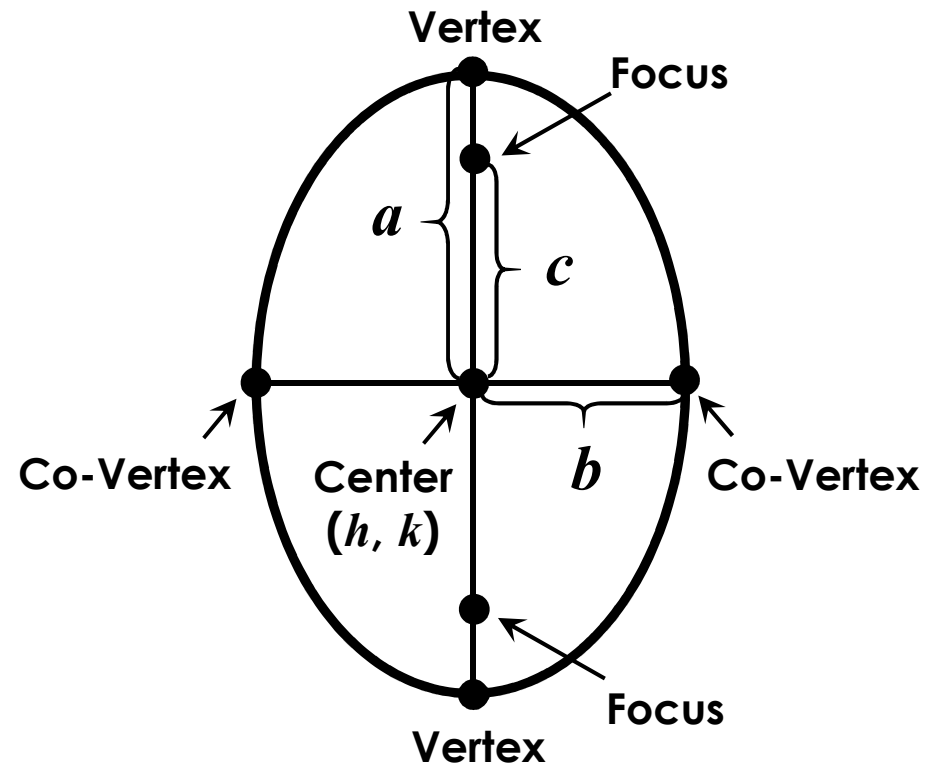
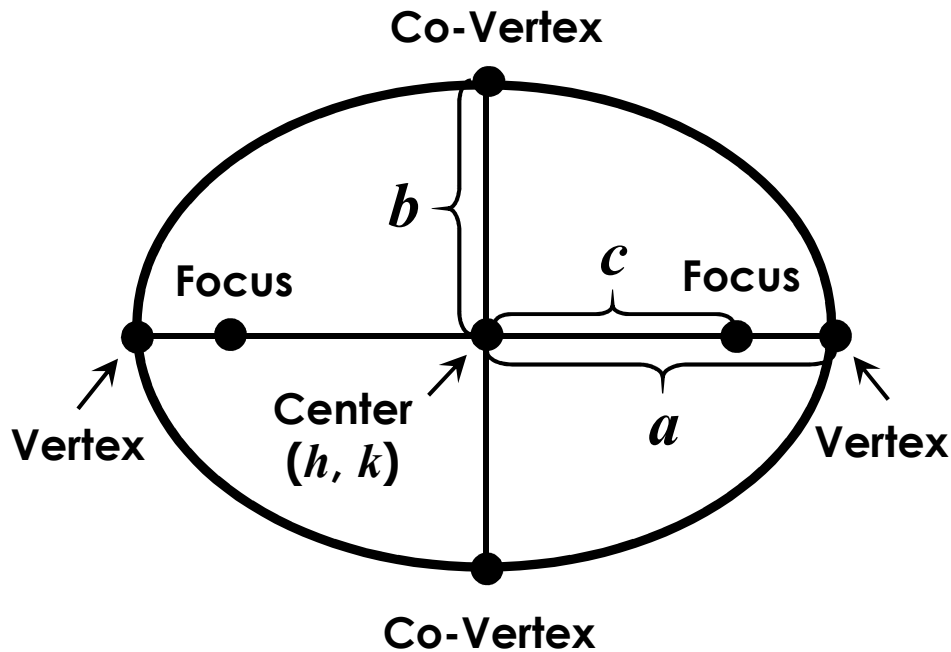
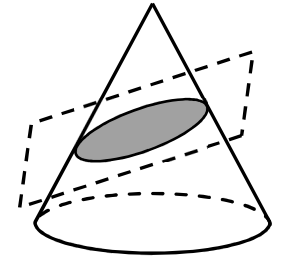
Opens LEFT if $p < 0$

CIRCLE



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

ELLIPSE

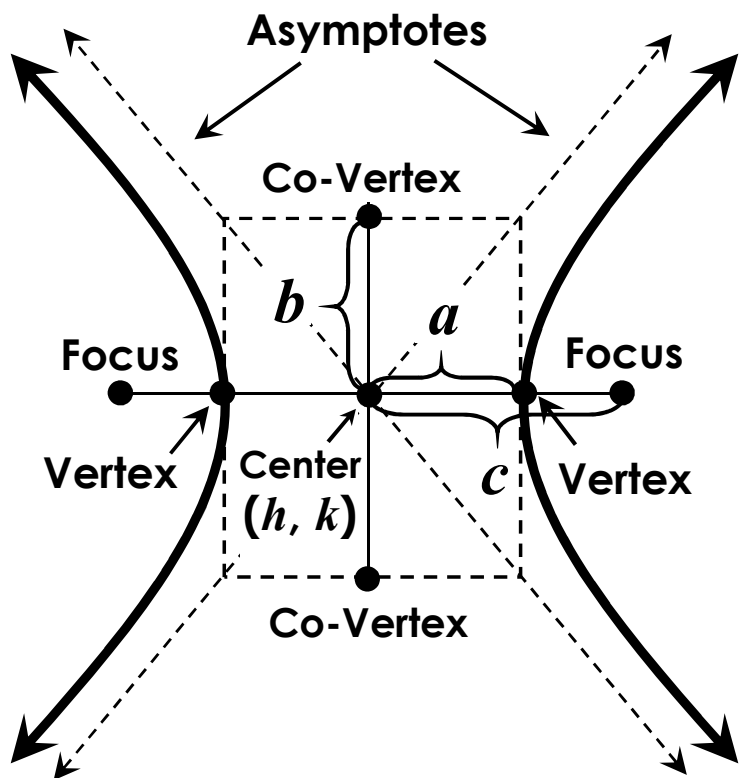
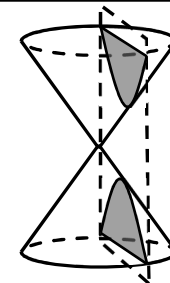


$$\frac{(x-h)^2}{a^2} + \frac{(y-k)^2}{b^2} = 1$$

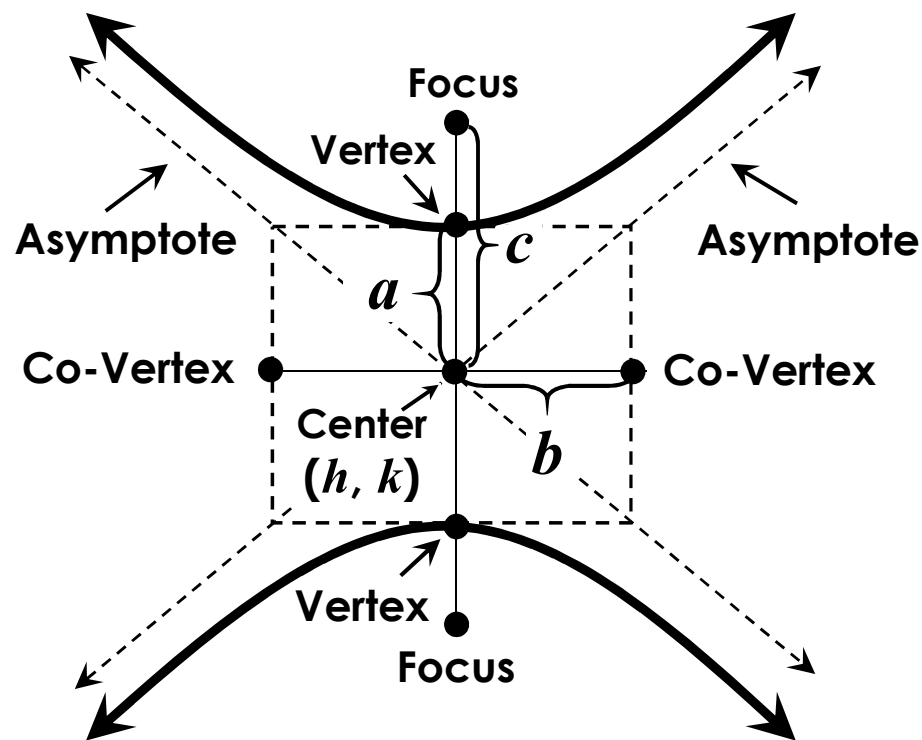
$$\frac{(x-h)^2}{b^2} + \frac{(y-k)^2}{a^2} = 1$$

FORMULA FOR C: $c^2 = a^2 - b^2$

HYPERBOLA



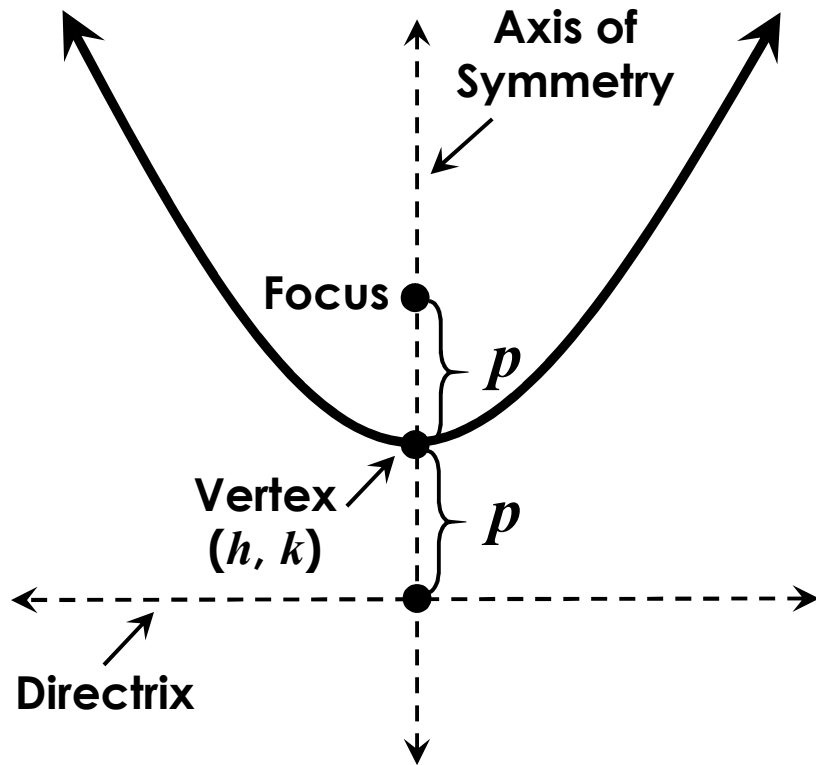
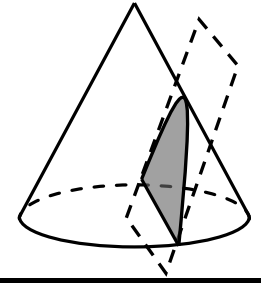
$$\frac{(x - h)^2}{a^2} - \frac{(y - k)^2}{b^2} = 1$$



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

FORMULA FOR C: $c^2 = a^2 + b^2$

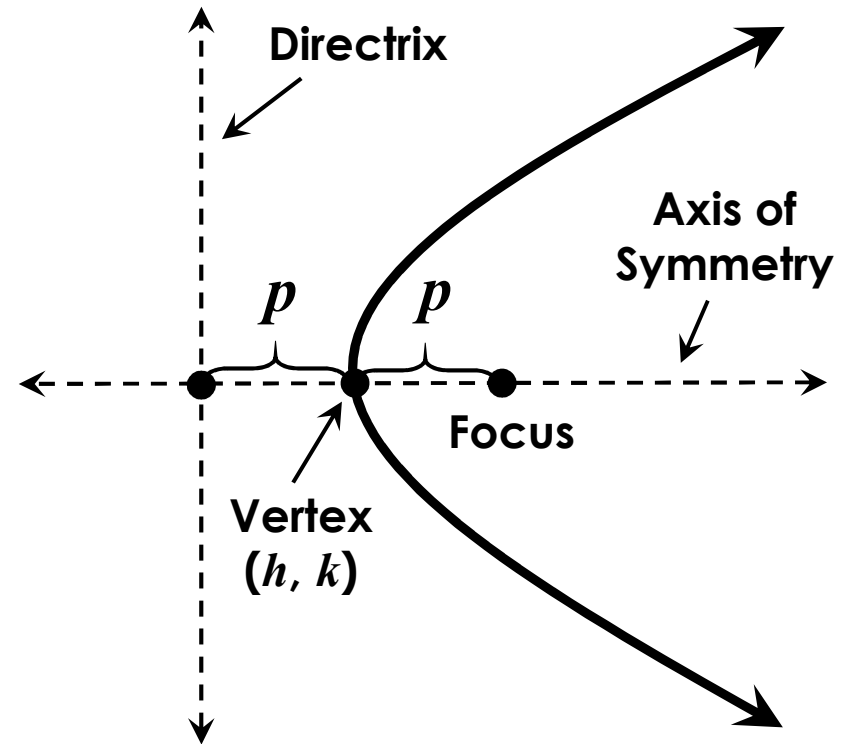
PARABOLA



$$(x - h)^2 = 4p(y - k)$$

Opens UP if $p > 0$

Opens DOWN if $p < 0$



$$(y - k)^2 = 4p(x - h)$$

Opens RIGHT if $p > 0$

Opens LEFT if $p < 0$

Thank you SO MUCH for purchasing this product!

I hope you found this resource useful in your classroom! Please consider leaving feedback in [my TpT store](#) or email me at allthingsalgebra@gmail.com with any questions or comments.

You can also find me here:



Terms of Use

© 2012-2015 Gina Wilson (All Things Algebra)

By purchasing this product, the purchaser receives a limited individual license to reproduce the product for **individual single classroom use only**. This license is not intended for use by organizations or multiple users, including but not limited to school districts, schools, or multiple teachers within a grade level.

This resource is not to be shared with colleagues, used by an entire grade level, school, or district without purchasing the proper number of licenses. Please contact me should you wish to purchase a large number of licenses.

No part of this publication may be reproduced, distributed, or transmitted without the written permission of the author. This includes posting this product on the internet, in any form, including classroom/personal websites or network drives.

Thank you for respecting my work!

Gina

