# Classifying Conics

Is there an $x^2$ and $y^2$ term?

NO → Parabola

YES
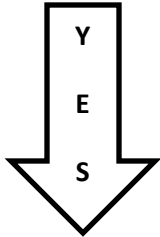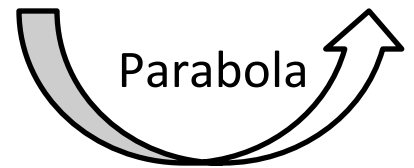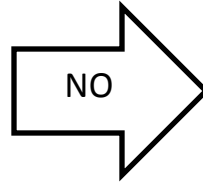
Do the $x^2$ and $y^2$ terms have the same sign?

NO → Hyperbola

YES
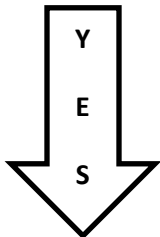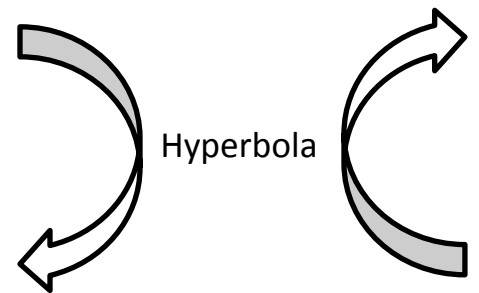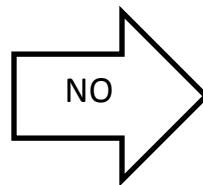
Do the $x^2$ and $y^2$ terms have the same coefficients?

NO → Ellipse

YES

Circle