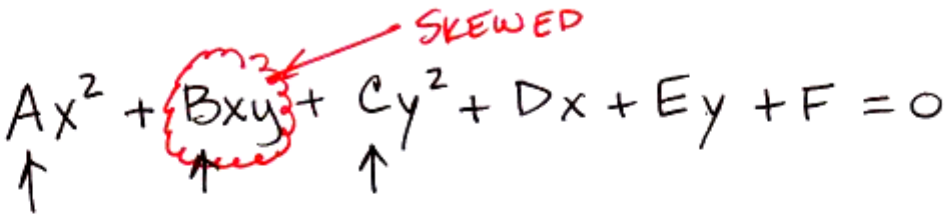
SEC 8.4 GENERAL CONICS

1. GENERAL FORM FOR A CONIC



$B^2 - 4AC < 0$ CIRCLE OR ELLIPSE

$B^2 - 4AC = 0$ PARABOLA

$B^2 - 4AC > 0$ HYPERBOLA

IF NO "Bxy" TERM EXISTS

$A = C$ CIRCLE

$A \neq C$ BUT BOTH POSITIVE — ELLIPSE

ONLY ONE SQUARED TERM EXISTS — PARABOLA

$A \neq C$ BUT ONE POSITIVE THE OTHER NEGATIVE
THEN — HYPERBOLA