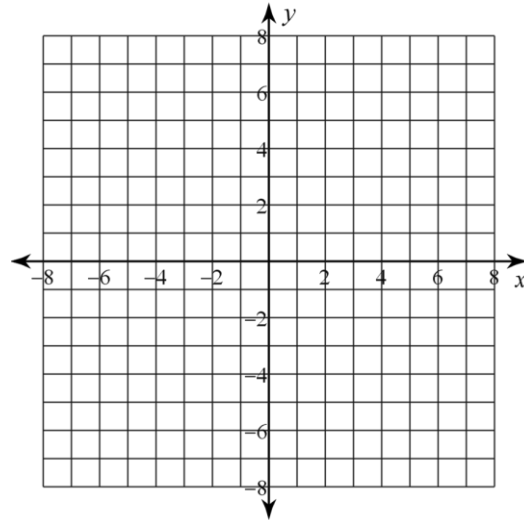


14.6.D1 ~ CLASSIFYING CONICS

Classify each conic section and complete the square to write its equation in standard form. For parabolas, identify the vertex, focus, and directrix. For ellipses and hyperbolas identify the center, vertices, and foci. For ellipses, also find the co-vertices. Then sketch the graph of the conic section.

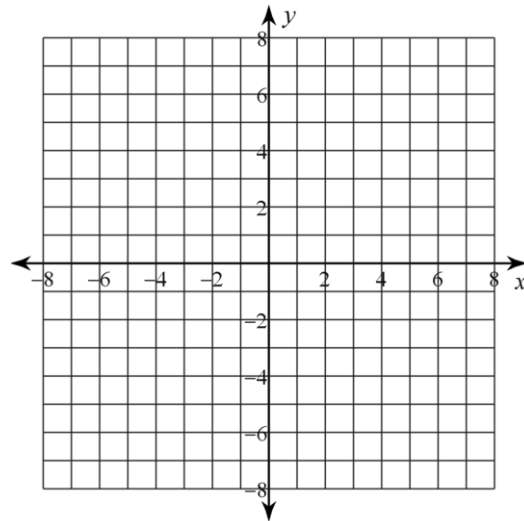
1. $x^2 + 10y - 6x - 1 = 0$

- CONIC SECTION _____
- STANDARD FORM _____
- CENTER _____
- VERTEX/VERTICES _____
- CO-VERTICES _____
- FOCUS/FOCI _____
- DIRECTRIX _____



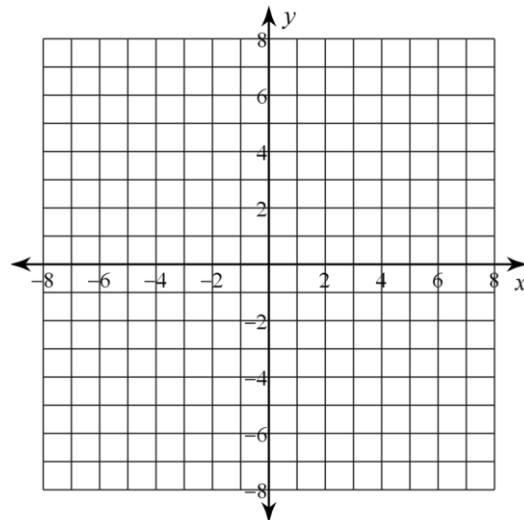
2. $4x^2 + 9y^2 - 24x + 90y + 225 = 0$

- CONIC SECTION _____
- STANDARD FORM _____
- CENTER _____
- VERTEX/VERTICES _____
- CO-VERTICES _____
- FOCUS/FOCI _____
- DIRECTRIX _____



3. $16y^2 - 4x^2 + 64y - 24x - 36 = 0$

- CONIC SECTION _____
- STANDARD FORM _____
- CENTER _____
- VERTEX/VERTICES _____
- CO-VERTICES _____
- FOCUS/FOCI _____
- DIRECTRIX _____



$$4. -4y^2 - 48y - 48x - 48 = 0$$

CONIC SECTION _____

STANDARD FORM _____

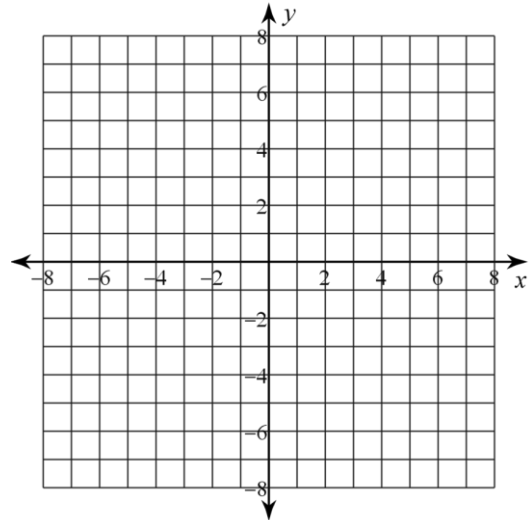
CENTER _____

VERTEX/
VERTICES _____

CO-VERTICES _____

FOCUS/FOCI _____

DIRECTRIX _____



$$5. 4x^2 + 25y^2 - 16x - 350y + 1141 = 0$$

CONIC SECTION _____

STANDARD FORM _____

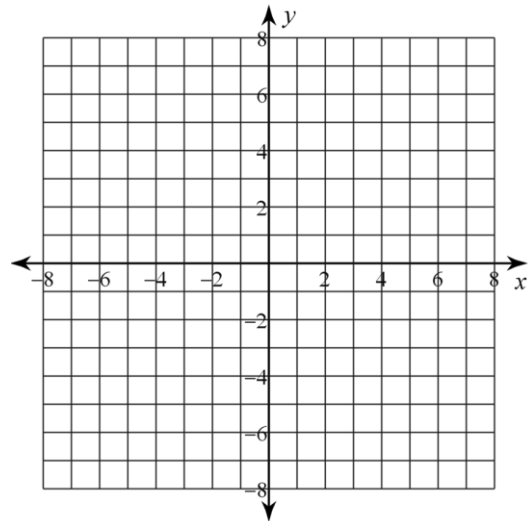
CENTER _____

VERTEX/
VERTICES _____

CO-VERTICES _____

FOCUS/FOCI _____

DIRECTRIX _____



$$6. -x^2 + 4y^2 - 8x - 24y + 4 = 0$$

CONIC SECTION _____

STANDARD FORM _____

CENTER _____

VERTEX/
VERTICES _____

CO-VERTICES _____

FOCUS/FOCI _____

DIRECTRIX _____

