

Ellipses

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Name: _____

For each equation, sketch the ellipse and its points of interest: foci, vertices, and center.

1)
$$\frac{(x - 2)^2}{25} + \frac{(y - 1)^2}{16} = 1$$

2)
$$\frac{(x + 3)^2}{9} + \frac{(y - 2)^2}{36} = 1$$

3)
$$\frac{(x - 5)^2}{4} + \frac{(y + 3)^2}{9} = 1$$

Use the given information to write an equation of an ellipse.

- 4) A certain ellipse has vertices at (5, 1), (2, 3), (-1, 1), and (2, -1). Locate its center, write the equation of the ellipse and locate its foci.

