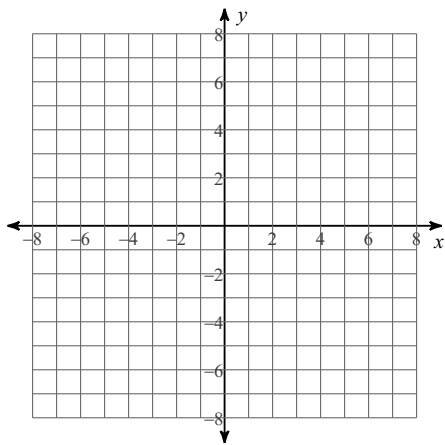


14.3.D1 ~ Ellipses: Graphing & Properties

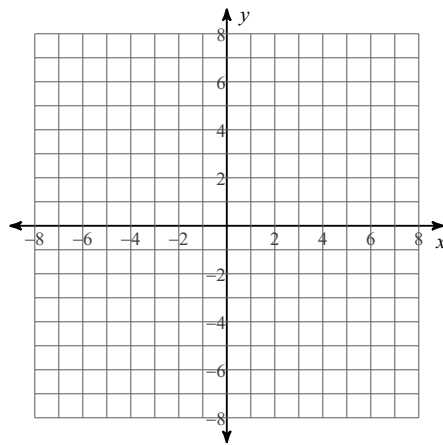
Past due on _____ Period _____

For the ellipse, whose standard form equation is given, identify the coordinates of the center, vertices, co-vertices, and foci. Record these in the table provided (on the flip side). Then sketch its graph.

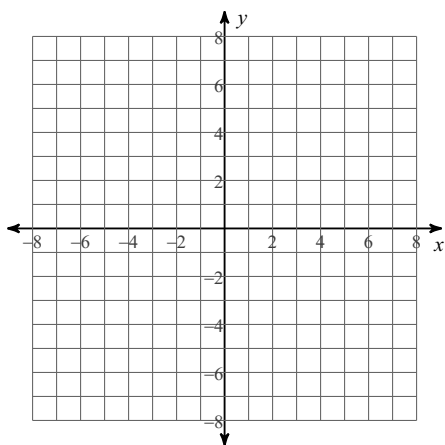
1) $\frac{(x-1)^2}{9} + \frac{(y+1)^2}{36} = 1$



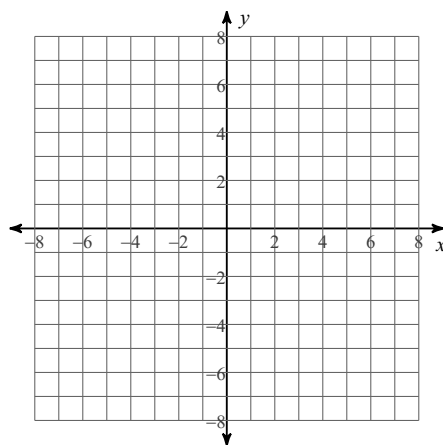
2) $\frac{(x+2)^2}{25} + \frac{(y-2)^2}{4} = 1$



3) $\frac{(x+2)^2}{25} + \frac{(y-1)^2}{36} = 1$



4) $\frac{x^2}{49} + \frac{(y-4)^2}{9} = 1$



Consider the ellipse, whose equation in general form is given. Complete the square to write the equation in standard form. Then identify the coordinates of the center, vertices, co-vertices, and foci. Record these in the table provided (on the flip side).

5) $16x^2 + 25y^2 + 320x - 50y + 25 = 0$

6) $4x^2 + 9y^2 - 32x - 162y + 217 = 0$

7) $121x^2 + 9y^2 + 484x - 72y - 461 = 0$

8) $8x^2 + 15y^2 + 144x - 150y + 423 = 0$