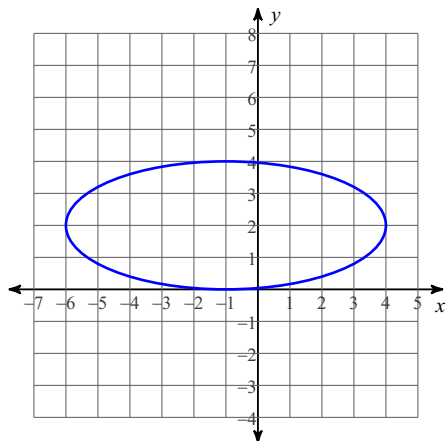


14.3.D2 ~ Ellipses: Writing Equations

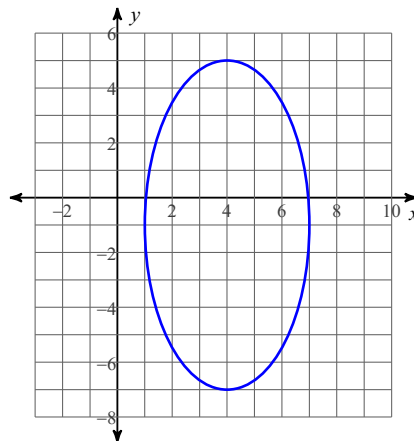
Past due on _____ Period _____

Write the standard form equation of the ellipse whose graph is shown.

1)



2)

**Write the equation of the ellipse with the following characteristics.**

- 3) Center: $(3, 6)$
 Vertex: $(14, 6)$
 Focus: $(3 + 4\sqrt{7}, 6)$

- 4) Center: $(-5, -6)$
 Vertex: $(-12, -6)$
 Co-vertex: $(-5, -3)$

- 5) Center: $(8, 4)$
 Focus: $(8, -1)$
 Co-vertex: $(-4, 4)$

- 6) Foci: $(5 + \sqrt{39}, -8), (5 - \sqrt{39}, -8)$
 Co-vertices: $(5, -3), (5, -13)$

7) Vertices: $(2, -10), (-12, -10)$
Co-vertices: $(-5, -4), (-5, -16)$

8) Vertices: $(-4, 5), (-4, -25)$
Foci: $(-4, -10 + 5\sqrt{5}), (-4, -10 - 5\sqrt{5})$

9) Foci: $(-1, 2), (-1, -8)$
Endpoints of major axis: $(-1, 10), (-1, -16)$

10) Endpoints of major axis: $(19, 6), (-3, 6)$
Endpoints of minor axis: $(8, 16), (8, -4)$

11) Vertices: $(8, 13), (8, 3)$
Foci: $(8, 11), (8, 5)$

12) Foci: $(13, -10), (5, -10)$
Endpoints of minor axis: $(9, -7), (9, -13)$