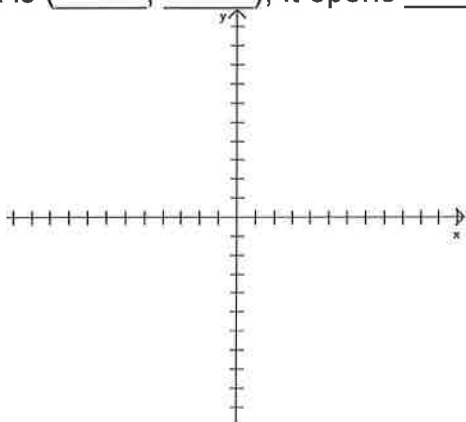


Name _____
 Conic Sections (without hyperbolas)
 Hour _____
 Date _____

The first four problems are parabolas. You are to fill in the missing information and sketch the graph.

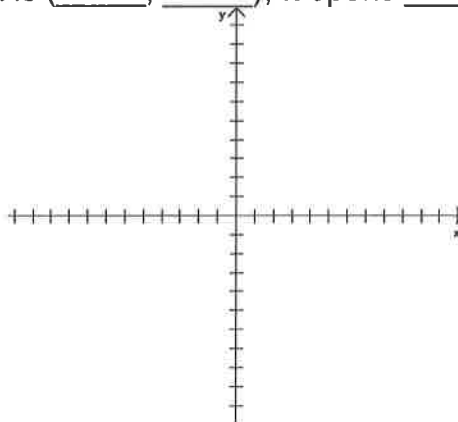
1. $y = -(x+1)^2 - 2$

Vertex is (_____, _____); It opens _____.



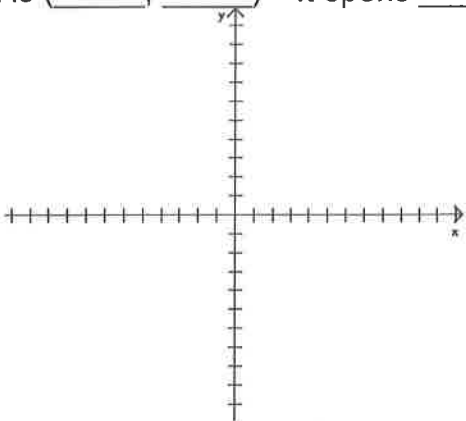
2. $y = (x-4)^2 + 2$

Vertex is (_____, _____); It opens _____.



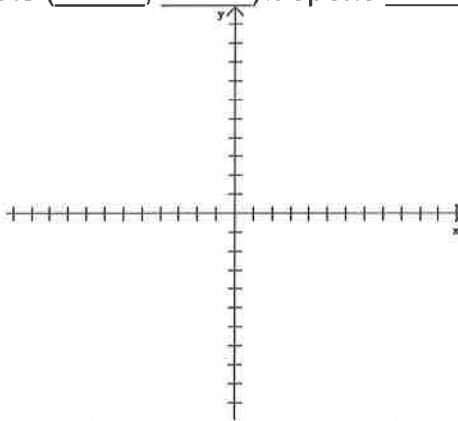
3. $x = (y+2)^2 - 3$

Vertex is (_____, _____) It opens _____.



4. $x = -(y-1)^2 + 2$

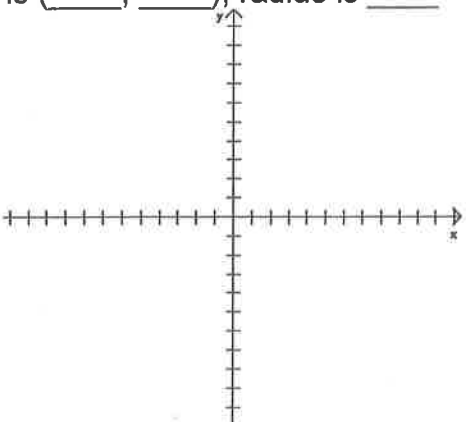
Vertex is (_____, _____) It opens _____.



The next two problems are circles. You are to fill in the missing information and sketch the graph.

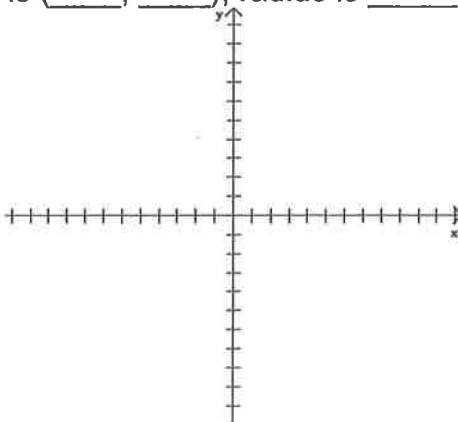
5. $(x+1)^2 + (y-4)^2 = 9$

center is (_____, _____); radius is _____



6. $(x-2)^2 + (y+3)^2 = 4$

center is (_____, _____); radius is _____



Then next four problems are ellipses. You are to fill in the missing information and sketch the graph.

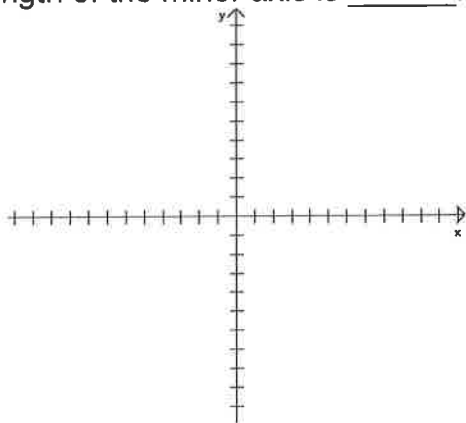
$$7. \frac{x^2}{4} + \frac{y^2}{9} = 1$$

Center is (____, ____)

The major axis is parallel to the ____-axis.

The length of the major axis is ____.

The length of the minor axis is ____.



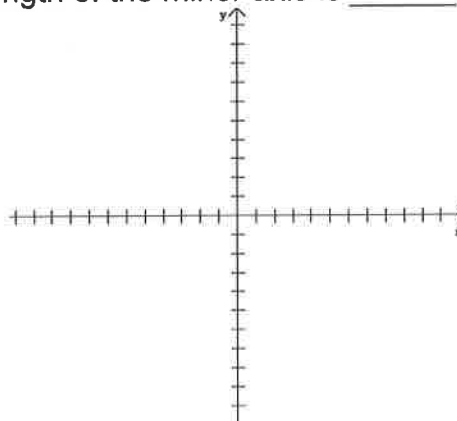
$$8. \frac{(x-1)^2}{16} + \frac{(y+1)^2}{4} = 1$$

Center is (____, ____)

The major axis is parallel to the ____-axis.

The length of the major axis is ____.

The length of the minor axis is ____.



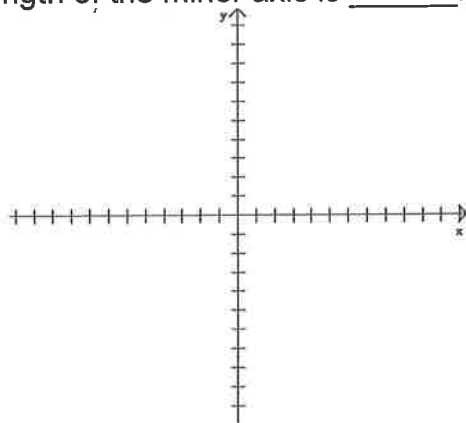
$$9. \frac{(x+2)^2}{9} + \frac{(y-3)^2}{4} = 1$$

Center is (____, ____)

The major axis is parallel to the ____-axis.

The length of the major axis is ____.

The length of the minor axis is ____.



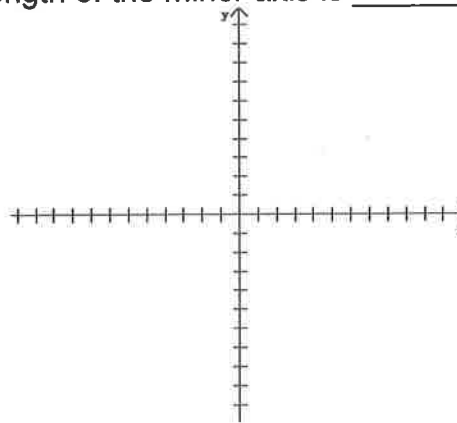
$$10. \frac{(x-4)^2}{4} + \frac{(y+5)^2}{9} = 1$$

Center is (____, ____)

The major axis is parallel to the ____-axis.

The length of the major axis is ____.

The length of the minor axis is ____.



Name _____



Date _____

Conics

(Answer ID # 0867516)

Classify the conic section.

1. $\frac{(x - 4)^2}{25} + \frac{(y + 4)^2}{36} = 1$	2. $x - 5 = -\frac{1}{36}(y - 1)^2$
3. $x = \frac{-1}{48}y^2$	4. $(x - 6)^2 + (y + 6)^2 = \frac{4489}{100}$
5. $\frac{x^2}{64} - \frac{y^2}{16} = 1$	6. $\frac{y^2}{4} - \frac{x^2}{4} = 1$
7. $x = \frac{-1}{44}y^2$	8. $\frac{(x + 1)^2}{25} + \frac{(y - 7)^2}{9} = 1$
9. $x + 8 = \frac{1}{28}(y + 7)^2$	10. $(x + 2)^2 + (y - 3)^2 = \frac{1}{81}$
11. $x = \frac{1}{4}y^2$	12. $\frac{y^2}{9} - \frac{x^2}{36} = 1$
13. $x - 7 = -\frac{1}{40}(y - 8)^2$	14. $x^2 + y^2 = 4$
15. $\frac{(x - 8)^2}{1} + \frac{(y + 6)^2}{49} = 1$	16. $x = \frac{1}{24}y^2$