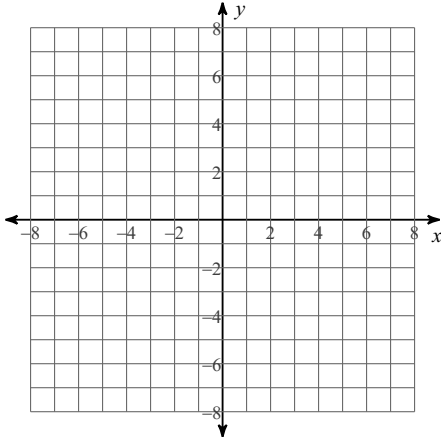


## Ellipses Practice #2

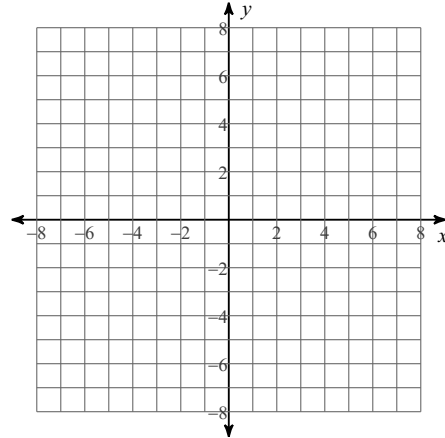
Date \_\_\_\_\_ Period \_\_\_\_\_

sketch the graph.

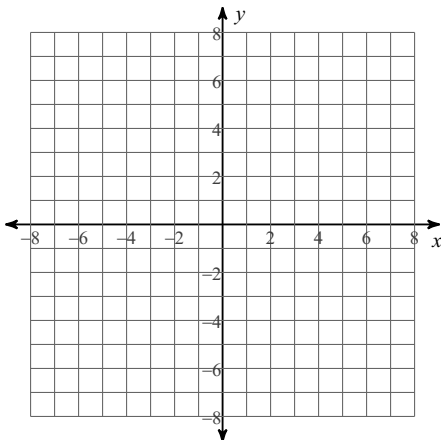
1)  $\frac{(x-2)^2}{25} + \frac{(y-4)^2}{5} = 1$



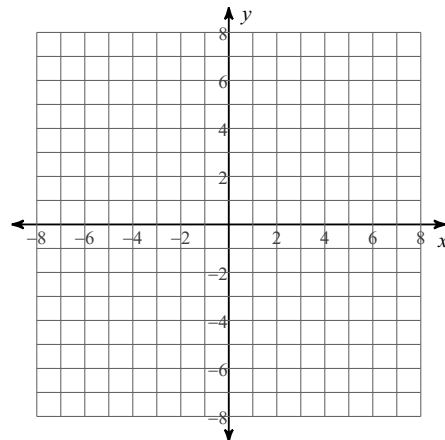
2)  $\frac{x^2}{16} + \frac{(y+2)^2}{9} = 1$



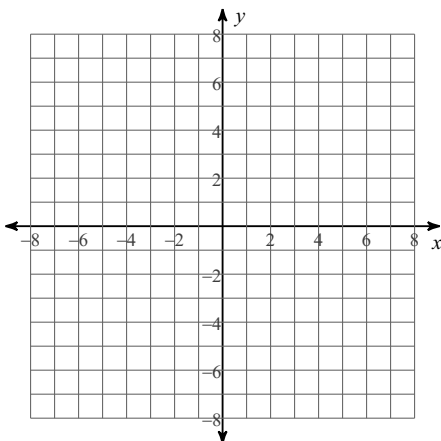
3)  $x^2 + 4y^2 - 4x - 8y + 4 = 0$



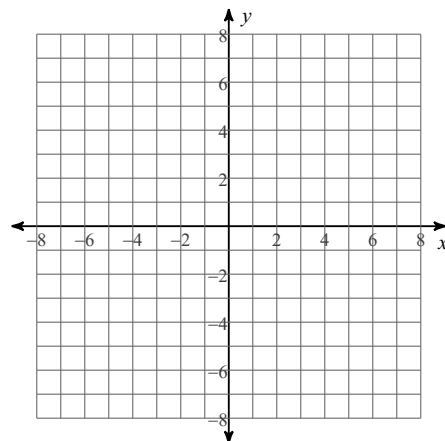
4)  $16x^2 + 25y^2 + 50y - 375 = 0$



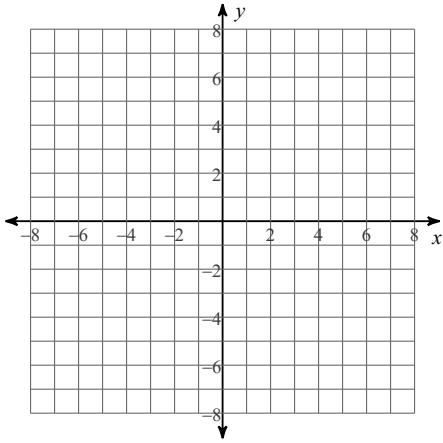
5)  $4x^2 + 9y^2 + 24x = 0$



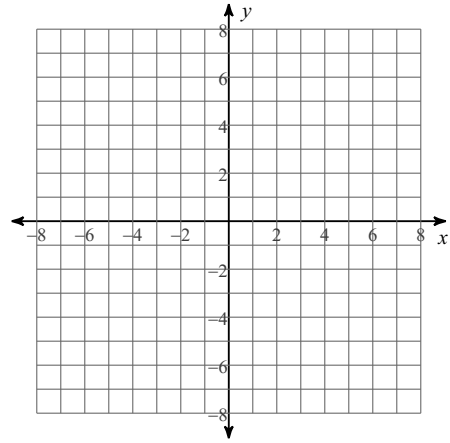
6)  $9x^2 + 4y^2 + 72x - 24y + 144 = 0$



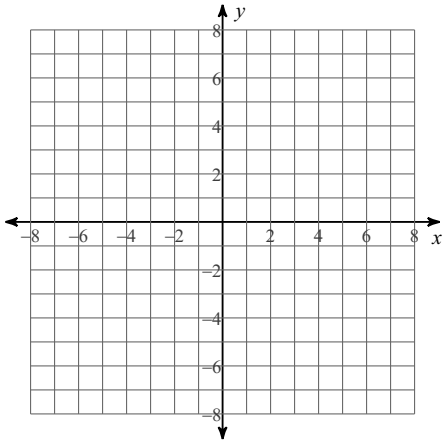
7)  $9x^2 + 49y^2 + 392y + 343 = 0$



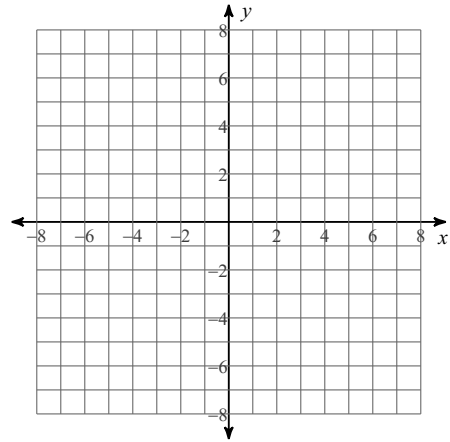
8)  $25x^2 + 4y^2 - 150x - 8y + 129 = 0$



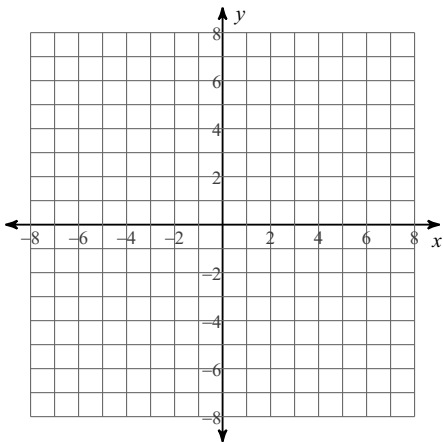
9)  $x^2 + 5y^2 + 4x + 40y + 59 = 0$



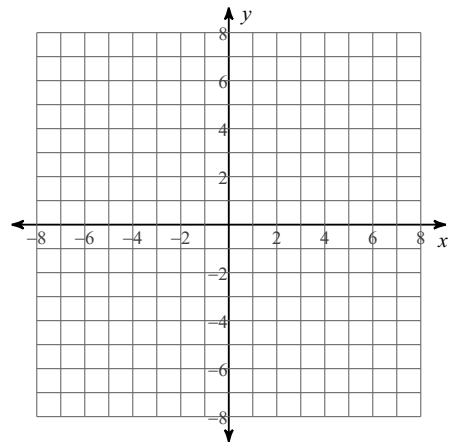
10)  $49x^2 + y^2 - 98x = 0$



11)  $9x^2 + y^2 + 54x + 45 = 0$



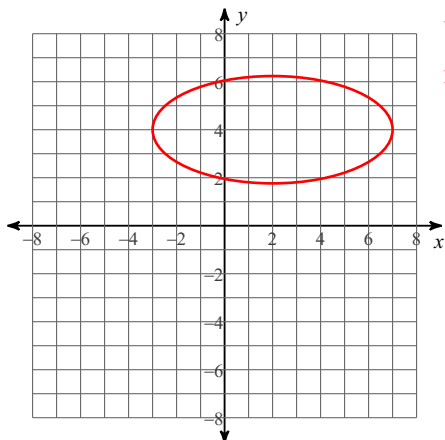
12)  $49x^2 + 16y^2 + 98x - 735 = 0$



Ellipses Practice #2

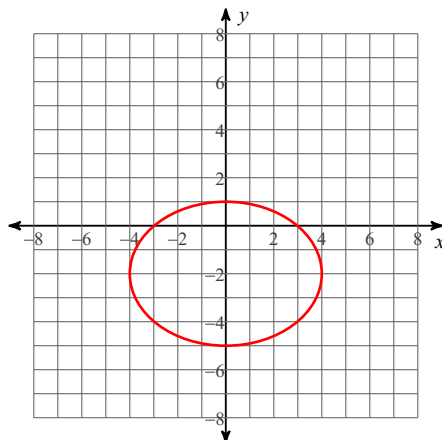
sketch the graph.

1)  $\frac{(x-2)^2}{25} + \frac{(y-4)^2}{5} = 1$



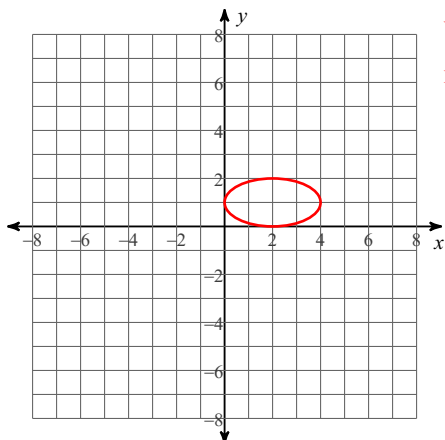
Vertices: (7, 4)  
(-3, 4)  
Foci:  $(2 + 2\sqrt{5}, 4)$   
 $(2 - 2\sqrt{5}, 4)$

2)  $\frac{x^2}{16} + \frac{(y+2)^2}{9} = 1$



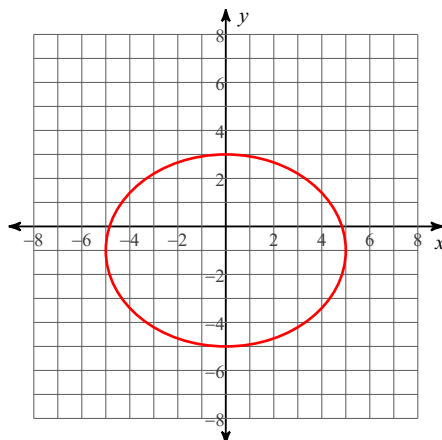
Vertices: (4, -2)  
(-4, -2)  
Foci:  $(\sqrt{7}, -2)$   
 $(-\sqrt{7}, -2)$

3)  $x^2 + 4y^2 - 4x - 8y + 4 = 0$



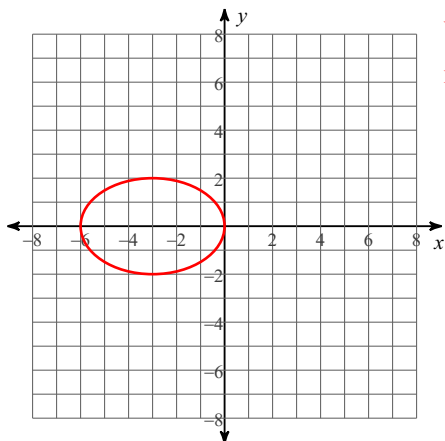
Vertices: (4, 1)  
(0, 1)  
Foci:  $(2 + \sqrt{3}, 1)$   
 $(2 - \sqrt{3}, 1)$

4)  $16x^2 + 25y^2 + 50y - 375 = 0$



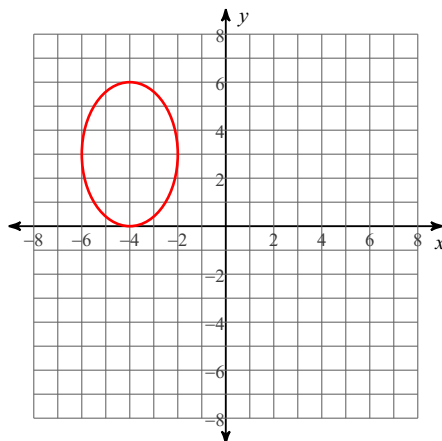
Vertices: (5, -1)  
(-5, -1)  
Foci: (3, -1)  
(-3, -1)

5)  $4x^2 + 9y^2 + 24x = 0$



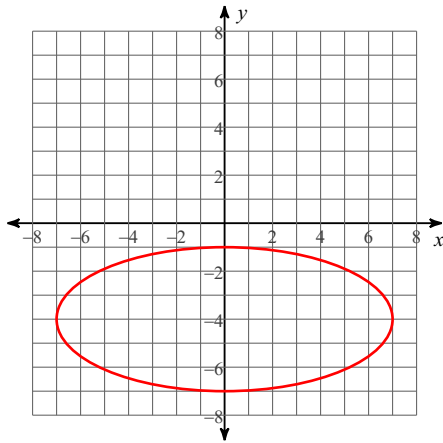
Vertices: (0, 0)  
(-6, 0)  
Foci:  $(-3 + \sqrt{5}, 0)$   
 $(-3 - \sqrt{5}, 0)$

6)  $9x^2 + 4y^2 + 72x - 24y + 144 = 0$



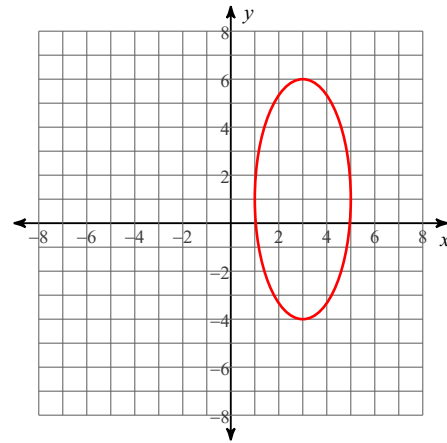
Vertices: (-4, 6)  
(-4, 0)  
Foci:  $(-4, 3 + \sqrt{5})$   
 $(-4, 3 - \sqrt{5})$

7)  $9x^2 + 49y^2 + 392y + 343 = 0$



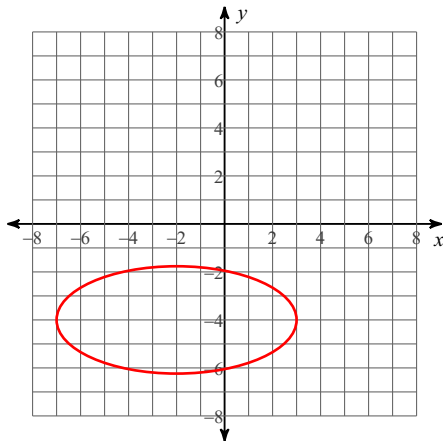
Vertices:  $(7, -4)$   
 $(-7, -4)$   
 Foci:  $(2\sqrt{10}, -4)$   
 $(-2\sqrt{10}, -4)$

8)  $25x^2 + 4y^2 - 150x - 8y + 129 = 0$



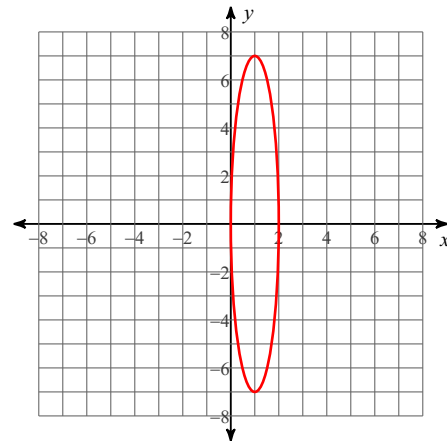
Vertices:  $(3, 6)$   
 $(3, -4)$   
 Foci:  $(3, 1 + \sqrt{21})$   
 $(3, 1 - \sqrt{21})$

9)  $x^2 + 5y^2 + 4x + 40y + 59 = 0$



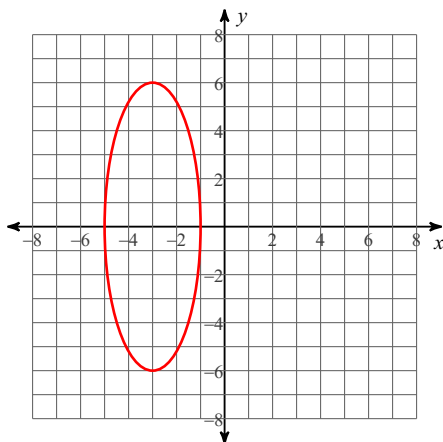
Vertices:  $(3, -4)$   
 $(-7, -4)$   
 Foci:  $(-2 + 2\sqrt{5}, -4)$   
 $(-2 - 2\sqrt{5}, -4)$

10)  $49x^2 + y^2 - 98x = 0$



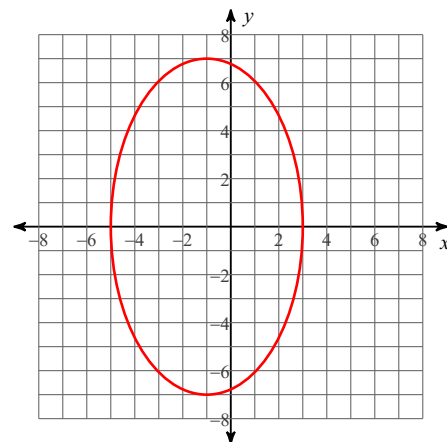
Vertices:  $(1, 7)$   
 $(1, -7)$   
 Foci:  $(1, 4\sqrt{3})$   
 $(1, -4\sqrt{3})$

11)  $9x^2 + y^2 + 54x + 45 = 0$



Vertices:  $(-3, 6)$   
 $(-3, -6)$   
 Foci:  $(-3, 4\sqrt{2})$   
 $(-3, -4\sqrt{2})$

12)  $49x^2 + 16y^2 + 98x - 735 = 0$



Vertices:  $(-1, 7)$   
 $(-1, -7)$   
 Foci:  $(-1, \sqrt{33})$   
 $(-1, -\sqrt{33})$