College Algebra
Weekly Quiz 5

Name:_____

No Work $\Leftrightarrow$ No Points

Use Pencil Only $\Leftrightarrow$ Be Neat & Organized

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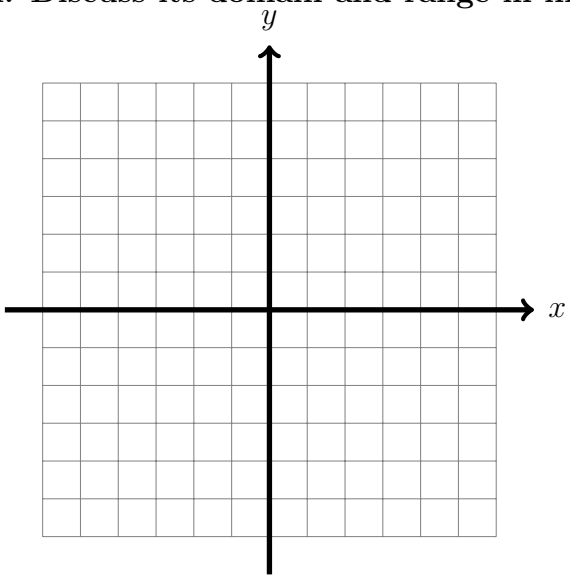
1. Consider $16x^2 + 4y^2 = 64$,

(a) (4 points) Graph. Discuss its domain and range in interval notation.



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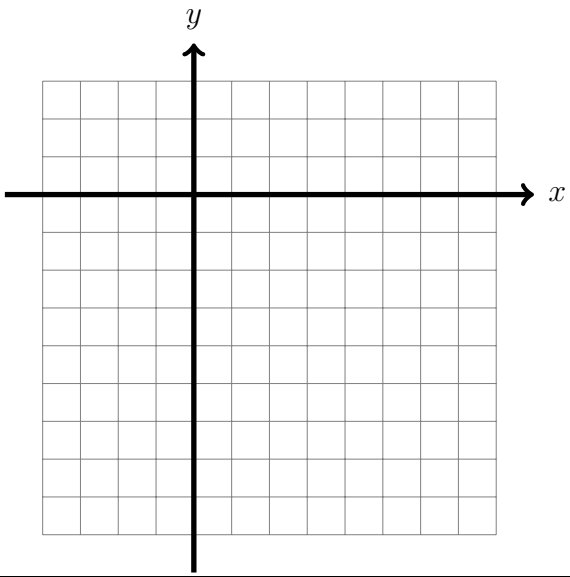
2. Consider $\dfrac{(x-2)^2}{4} + \dfrac{(y+3)^2}{9} = 1$,

(a) (4 points) Graph. Discuss its domain and range in interval notation.



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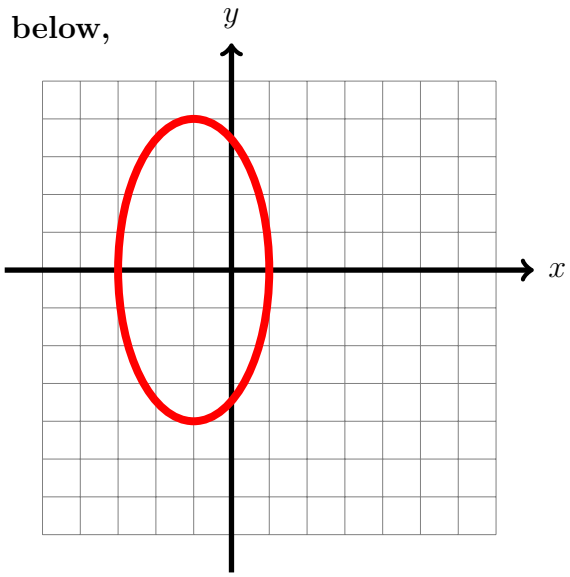
3. Consider the graph below,



(a) (2 points) Find its center.

(a) _____

(b) (3 points) Find its equation in $\frac{(x-h)^2}{a^2}+\frac{(y-k)^2}{b^2}=1$ **form.**

(b) _____

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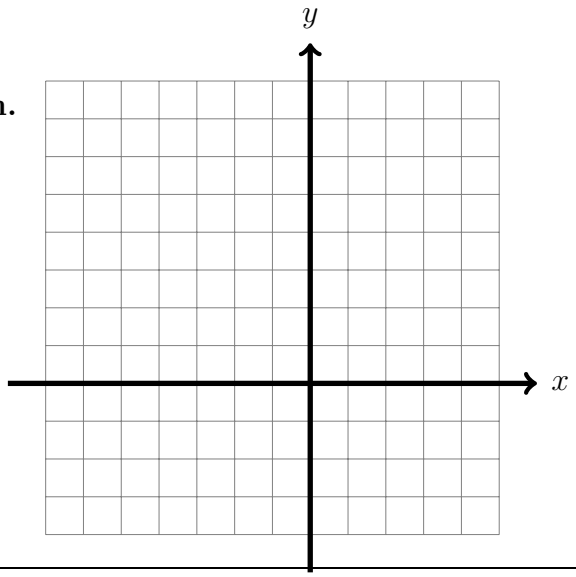
4. Consider $4(x+2)^2+9(y-3)^2=36$**,**

(a) (2 points) Write in $\frac{(x-h)^2}{a^2}+\frac{(y-k)^2}{b^2}=1$ **form.**

(a) _____

(b) (4 points) Graph.



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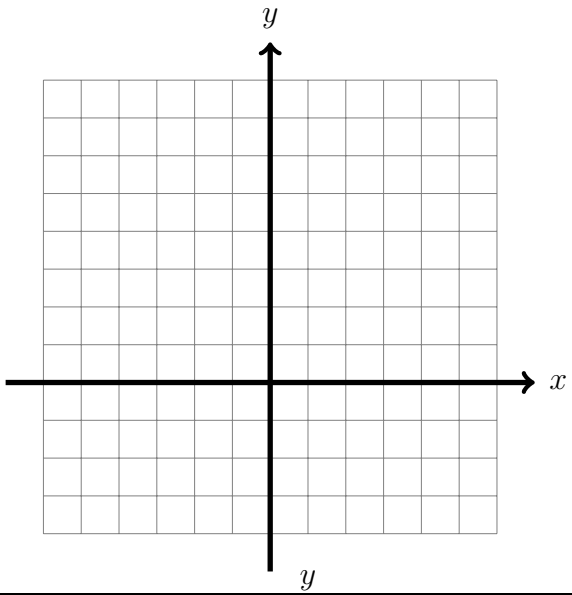
5. (4 points) Graph $\frac{x^2}{4} - \frac{(y-3)^2}{9} = 1$**.**



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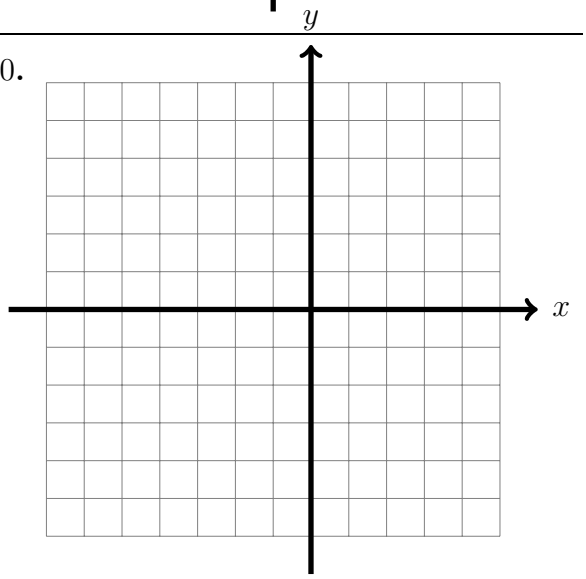
6. (4 points) Graph $25(x+2)^2 - 4y^2 = -100$**.**



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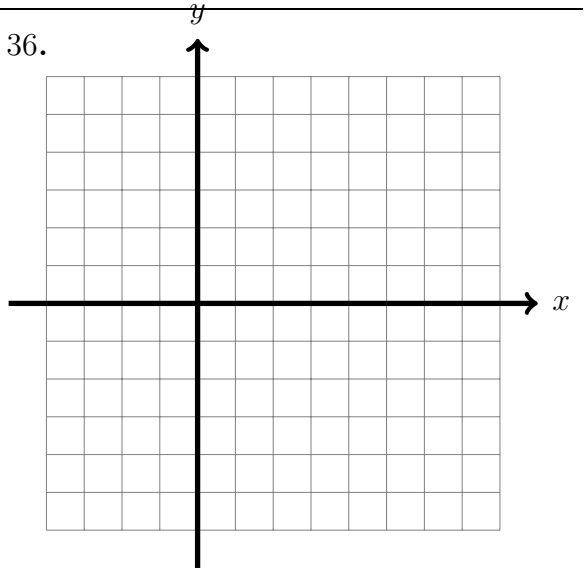
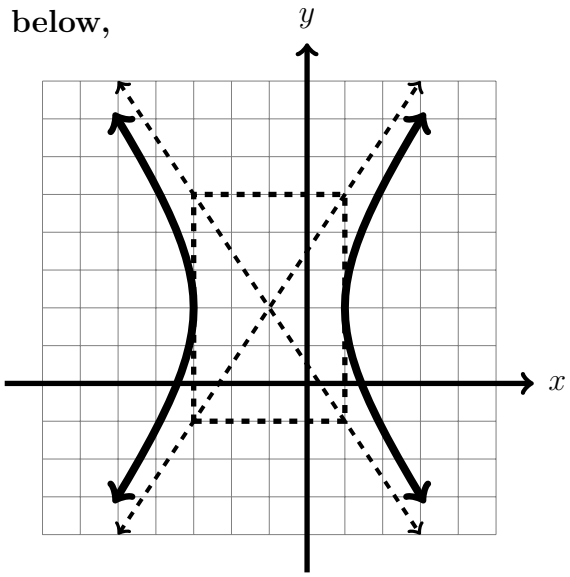
7. (4 points) Graph $4(x-3)^2 - 9(y+1)^2 = 36$**.**



8. Consider the graph below,



(a) (2 points) Find its center.

(a) _____

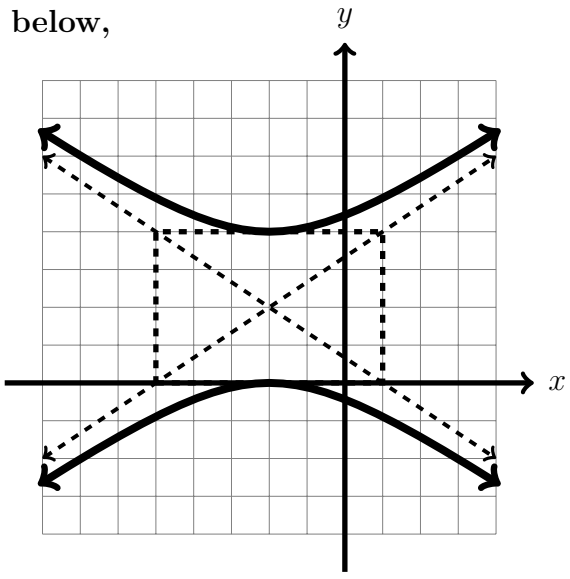
(b) (4 points) Find its equation in standard form.

(b) _____

(c) (4 points) Discuss its domain and range in interval notation.

(c) _____

9. Consider the graph below,



(a) (2 points) Find its center.

(a) _____

(b) (4 points) Find its equation in standard form.

(b) _____

(c) (4 points) Discuss its domain and range in interval notation.

(c) _____

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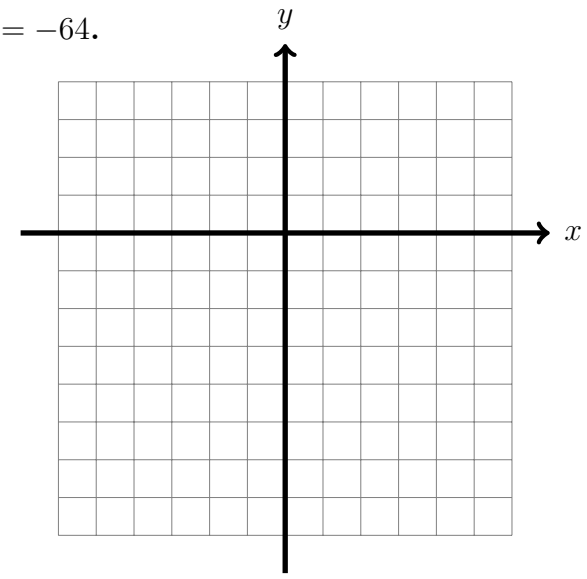
10. (4 points) Graph $16(x-2)^2 - 4(y+4)^2 = -64$.



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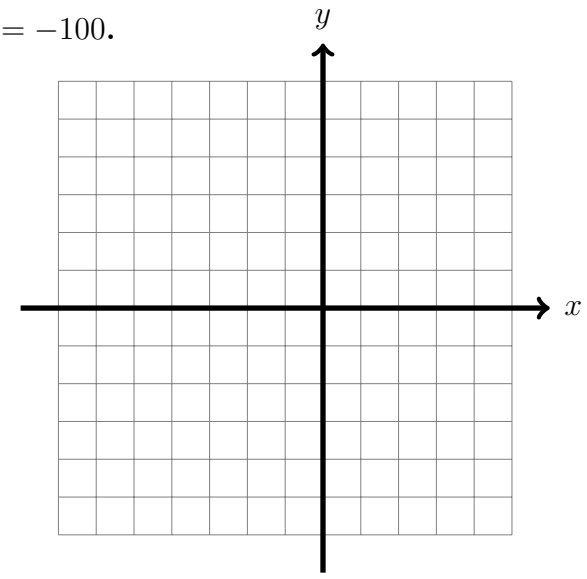
11. (5 points) Graph $25(y-1)^2 - 4(x+2)^2 = -100$.



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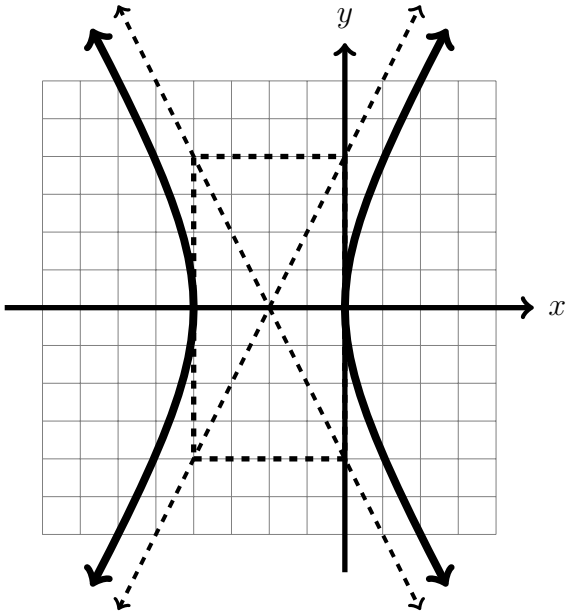
12. Consider the graph below,



(a) (2 points) Find its center.

(a) _____

(b) (4 points) Find its equation in standard form.

(b) _____

(c) (4 points) Discuss its domain and range in interval notation.

(c) _____