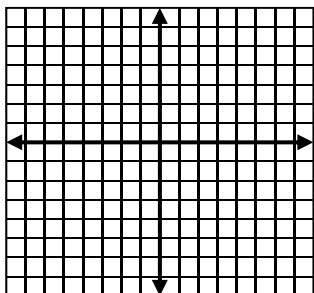


NO WORK = NO CREDIT!!!.....SHOW ALL WORK!

In 1-7, **sketch** and determine the number of intersection points.

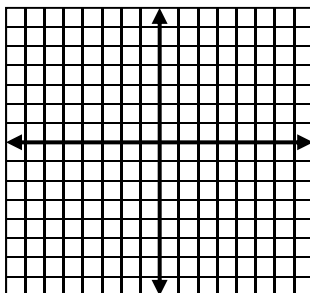
1.

$$x^2 + y^2 = 11; x - 1 = 2(y - 2)^2$$

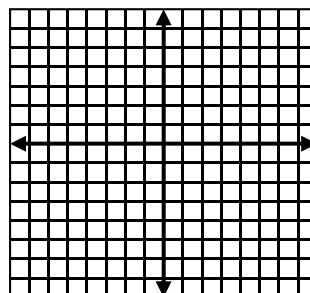


2.

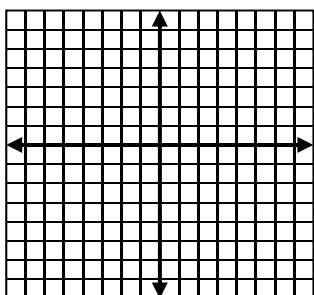
$$4x^2 + 9y^2 = 36; y = (x - 2)^2$$



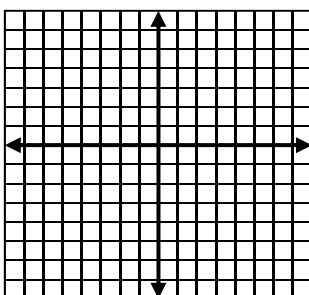
$$3. 4x^2 + 4y^2 = 16; x + y = 4$$



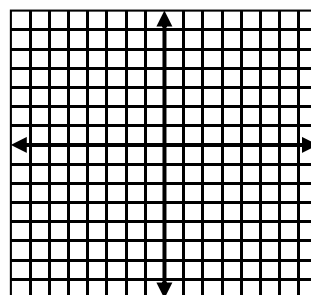
$$4. y = x^2 + 3; y = 3x + 1$$



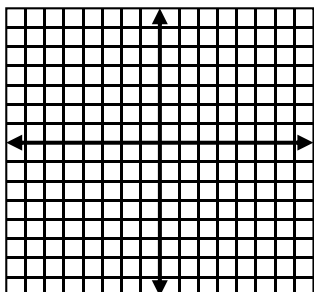
$$5. x^2 + y^2 = 7; x^2 - y^2 = 1$$



$$6. 4x^2 + 9y^2 = 36; x^2 - y^2 = 9$$



$$7. x^2 - y^2 = 7; y^2 = 2(x - 2)$$

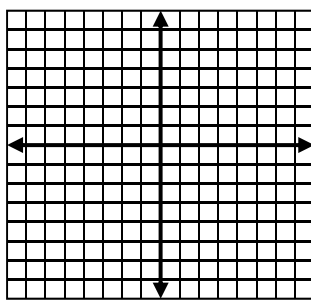
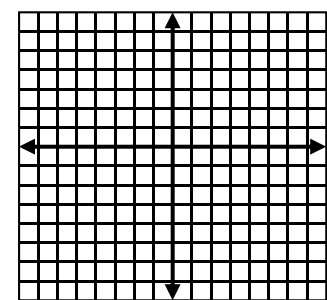


In 8-11 **SOLVE**. Use exact answers.

8. Solve #4

9. Solve #5

10. Solve #6	11. Solve #7	12. Write the equation of a circle with center (5,-4) and radius 5.
13. Find the center and radius of the circle whose equation is $x^2 + y^2 + 12x - 4y + 32 = 0$	14. Find the equation of a parabola with vertex (-1,6) , opening left, “a” value 2/3.	15. Find the vertex of the parabola $x^2 + 10x + 16y - 7 = 0$.
16. Name the vertices and co-vertices of $\frac{(y+4)^2}{3} - \frac{(x-2)^2}{6} = 1$	17. Sketch $x^2 + \frac{(y+1)^2}{9} = 1$	18. Find the equation of the circle with endpoints of a diameter (3,7) and (1,-3).



Answers: 1. Two 2. Two 3. None 4. Two 5. Four 6. Two 7. Two 8. (2,7)(1,4)
 9. $(2, \sqrt{3}), (2, -\sqrt{3}), (-2, \sqrt{3}), (-2, -\sqrt{3})$ 10. (3,0) (-3,0) 11. $(3, \sqrt{2}), (3, -\sqrt{2})$ 12. $(x-5)^2 + (y+4)^2 = 25$
 13. center (-6,2) $r=2\sqrt{2}$ 14. $x+1 = -\frac{2}{3}(y-6)^2$ 15. (-5,2)
 16. V: $2, (-4 - \sqrt{3}), (2, -4 + \sqrt{3})$ CV: $(2 + \sqrt{6}, -4), (2 - \sqrt{6}, -4)$ 17. $\frac{x^2}{1} + \frac{(y+1)^2}{9} = 1$
 18. $(x-2)^2 + (y-2)^2 = 26$