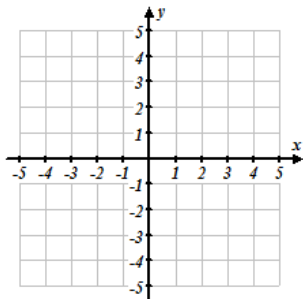
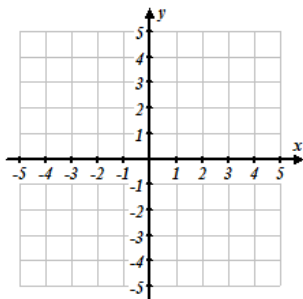


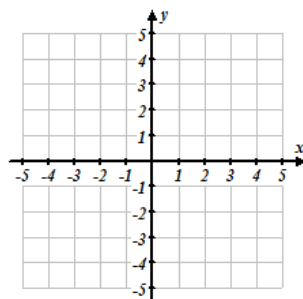
1. Create a picture of a circle and line that don't intersect.



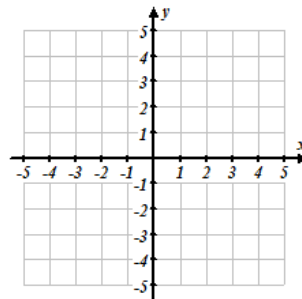
3. Create a picture of a circle and line that intersect once.



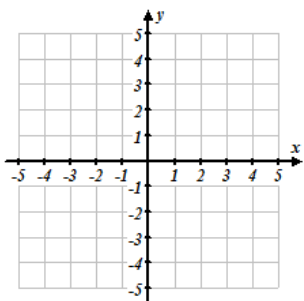
5. Create a picture of a circle and a parabola that intersect twice.



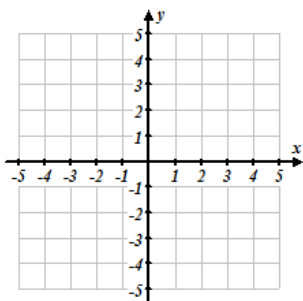
7. Create a picture of a circle and a parabola that intersect four times.



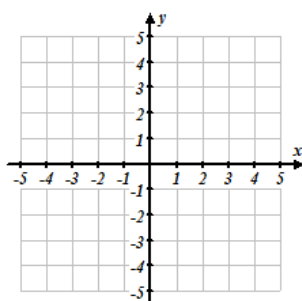
2. Create picture of a circle and a line that intersect twice.



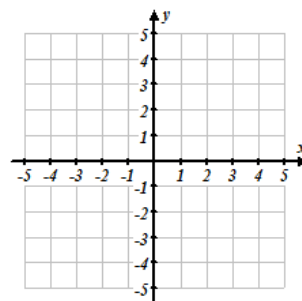
4. Create a picture of a circle and a parabola that intersect once.



6. Create a picture of a circle and a parabola that intersect three times.

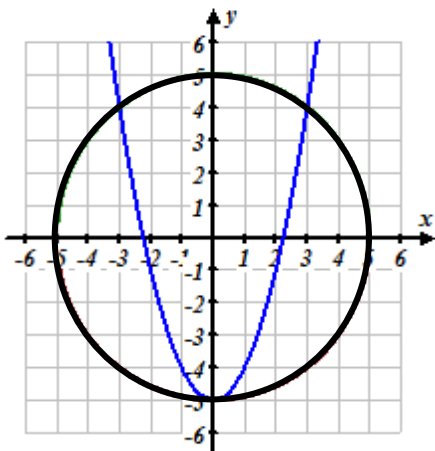


8. Create a picture of a parabola and another parabola that intersect four times.



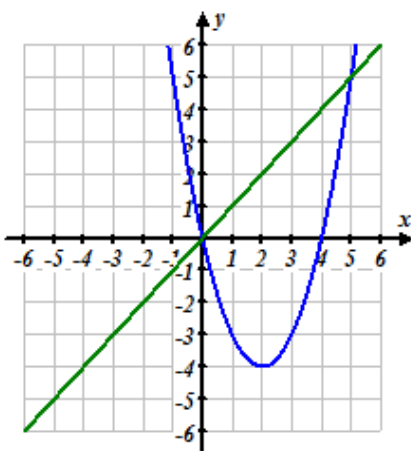
9. Find the intersection(s) of each of the following system of equations with the provided graph.

a. $x^2 + y^2 = 25$
 $y = x^2 - 5$



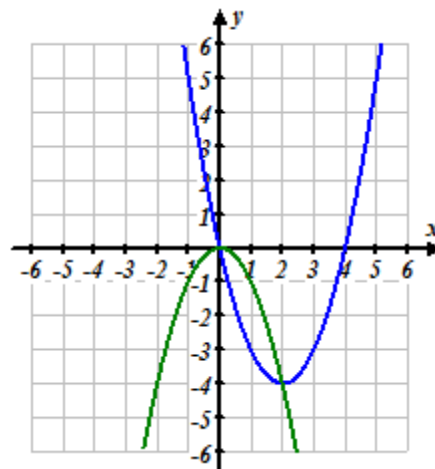
(3 answers)

b. $y = x^2 - 4x$
 $y = x$



(2 answers)

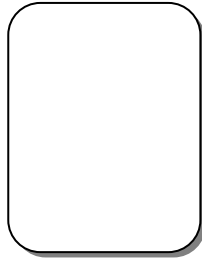
c. $y = x^2 - 4x$
 $y = -x^2$



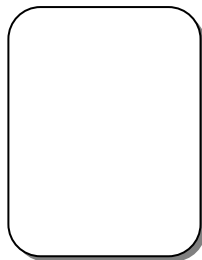
(2 answers)

10. Solve the following systems algebraically:

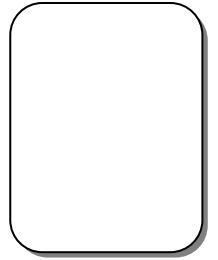
a. $y + 8 = x^2 + 2x$
 $y = -x + 2$



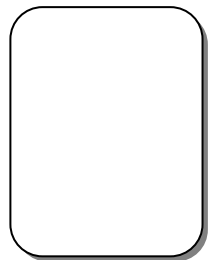
c. $y = 2x^2 - x - 10$
 $y = x + 5$



b. $x^2 + y^2 = 25$
 $y = x^2 - 13$



d. $x^2 + y^2 - 4y + 4 = 25$
 $x^2 = -6 - y$



11. A circle is centered at the origin and has a radius of 3 units. A horizontal line passes through the point $(0, 3)$. In how many places does the line intersect the circle?
12. A circle is centered at the origin and has a radius of $\sqrt{10}$ units. A line has a slope of -3 and passes through the origin. At which points does the line intersect the circle?
13. A parabola has a focus at $(-2, -15.75)$ and a diretrix of $y = -16.25$. A line has a slope of 2 and a y -intercept of -4 . What are the points at which the line intersects the parabola?