

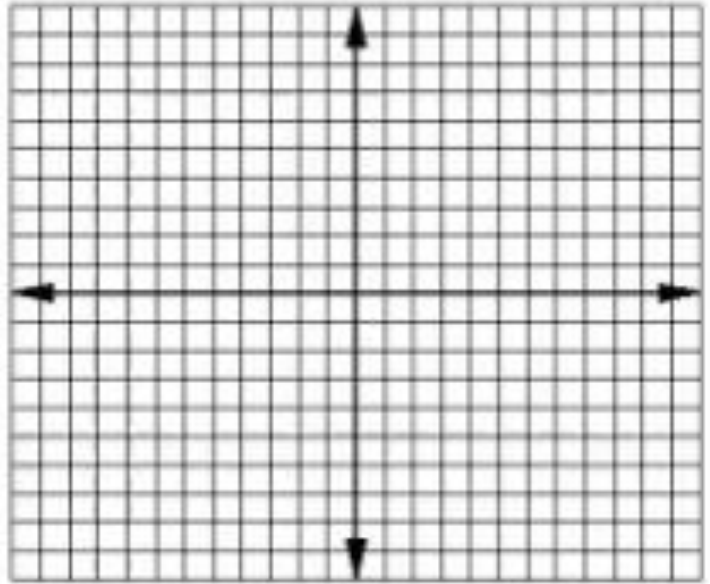
Intercepts, Symmetry, and Circles

Intercepts
 x-intercepts: (a, ___)
 y-intercepts: (___, b)

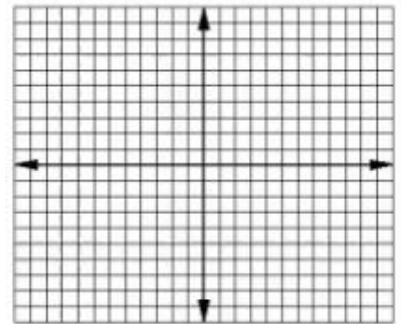
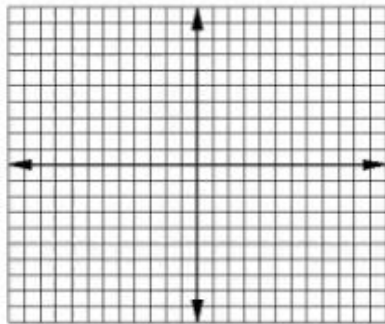
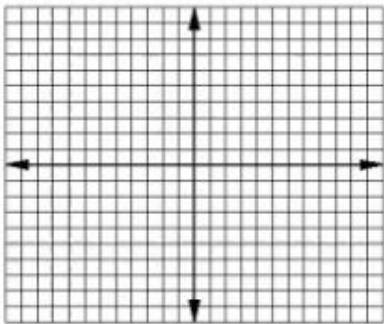
Please solve for x and y intercepts and graph, including the example from the video

Ex.) $y = x^2 - 9$

- $6 = 2x + 3y$
- $9x^2 + 4y = 36$
- $4x^2 + y = 4$



Draw and Label Symmetries

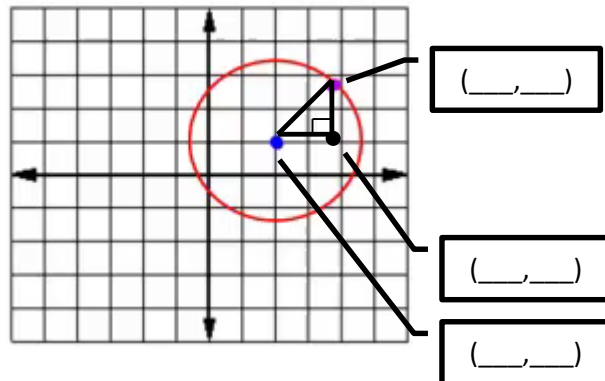


Please fill in the blanks

$r = \sqrt{\underline{\hspace{2cm}}}$

Standard Form

General Form



Practice

Calculate the intercepts and indicate symmetry

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

Write the standard and general forms for each of the given problems

- $R = 2$ (h,k) = (0,0)
- $R = 4$ (h,k) = (2,-3)
- $R = 1/2$ (h,k) = (0, -1/2)
- $R = 7$ (h,k) = (-5,-2)

Find the center and radius of each circle

- $3(x + 1)^2 + 3(y - 1)^2 = 6$
- $x^2 + y^2 - 2x - 4y - 4$
- $2x^2 + 8x + 2y^2 = 0$