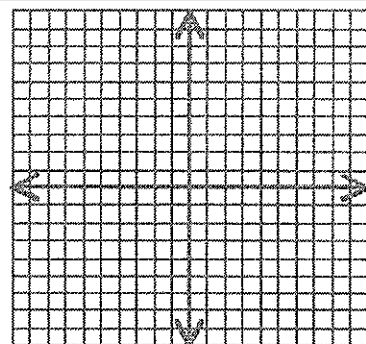


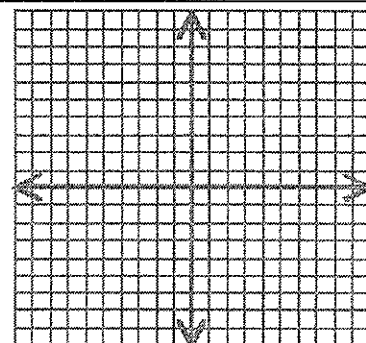
9.1 Practice Worksheet: Circles and Parabolas

Identify each conic as a circle or parabola. If a circle, identify the center and radius. If a parabola, identify the vertex, focus, directrix, latus rectum and AOS. Graph the conic.

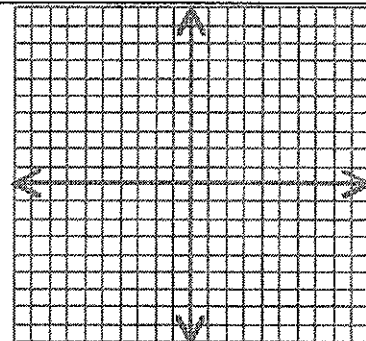
1.
$$\left(x + \frac{1}{2}\right)^2 = 4(y - 1)$$



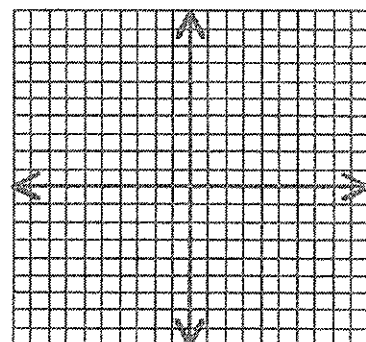
2.
$$y^2 - 4x - 4 = 0$$



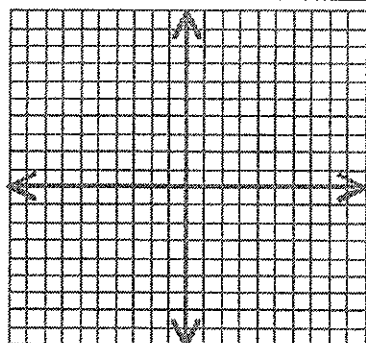
3.
$$x^2 - 2x + y^2 + 16y + 40 = 0$$



4.
$$x^2 + 8x + y^2 - 18 = 0$$



5.
$$x^2 + 4x + 6y - 2 = 0$$



Find the x-intercepts and y-intercepts of the graph of the conic.

6. $x^2 + 8x + y^2 - 6y - 27 = 0$	7. $(x+3)^2 = 8(y-1)$
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Write the standard form of the equation of the conic described.

8. A parabola with a vertex at $(3, -3)$ and a focus at $\left(3, -\frac{9}{4}\right)$.	9. A circle with a center of $(3, 7)$ and a point on the circle at $(1, -3)$.
10. A circle that is tangent to the y-axis and has its center at $(-5, 6)$.	11. A parabola that opens to the right with a vertex $(-7, -5)$ and passes through the point $(2, -1)$.
12. A parabola with its focus at $(2, 5)$ and the equation of the directrix is $x = 4$.	13. A circle that has endpoints of its diameter at $(1, -3)$ and $(2, 1)$.