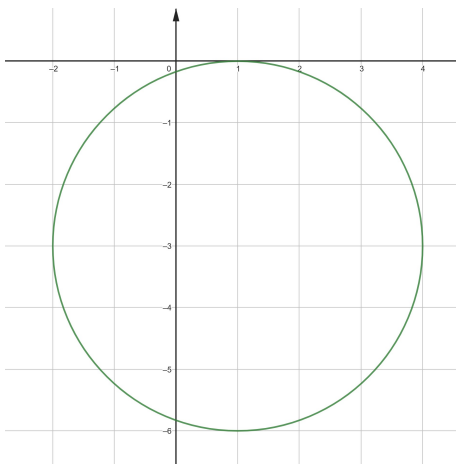
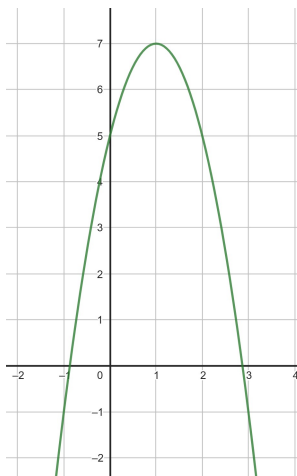


16.4 Exercises

1. Graph $y - 1 = (x + 3)^2$ and $(x + 3)^2 + (y - 1)^2 = 16$.
2. Graph $x - 1 = (y^3)^2$.
3. Graph $y + x^2 + 6x - 1 = 0$.
4. Graph $x^2 + y^2 - 8x + 4 = 0$.
5. Find an equation whose graph is



6. Find an equation whose graph is



7. Suppose the height h in feet of an object at time t seconds is given by $h = -16t^2 + 16t$. How high is the object at 0 second? Use the equation to find the x -intercepts and sketch the graph. How high is the object after $1/4$ seconds? At what other time is this the height of the object?

8. Do some online exploration and find at least one application of a parabola in real life different from falling objects.