

# Chapter 11 Review

## Quadratic Mini-Golf

Below is a map of four holes on a miniature golf course. The object of this mini-golf game is to use the graph of a quadratic equation to build a bumper around the holes that will make it easier to sink your putts. You want to putt your golf ball into a black hole. If your ball goes into a white hole, you lose it. The distances shown on the golf course below are units that correspond to the units on a coordinate grid. From the four equations below, pick the one whose graph will make your putt easier for each hole.

a.  $y = 4x^2 - 8x + 4$

b.  $y = -x^2 + 2x + 5$

c.  $y = x^2 - 6x + 1$

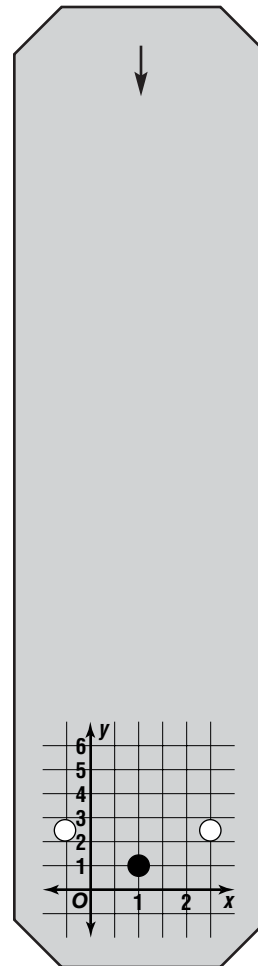
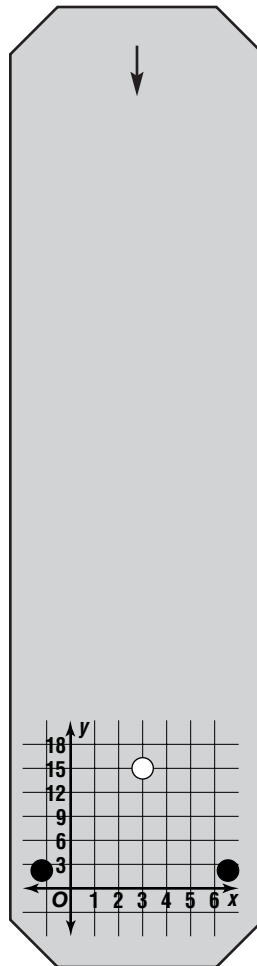
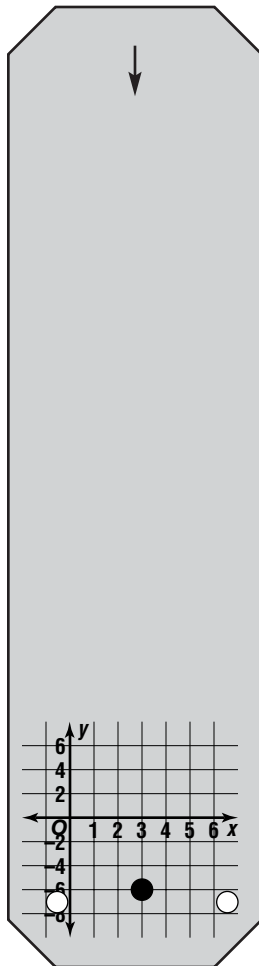
d.  $y = -2x^2 + 12x$

**Hole 1**  
Equation:

**Hole 2**  
Equation:

**Hole 3**  
Equation:

**Hole 4**  
Equation:



Answers are located on pages 117–118.