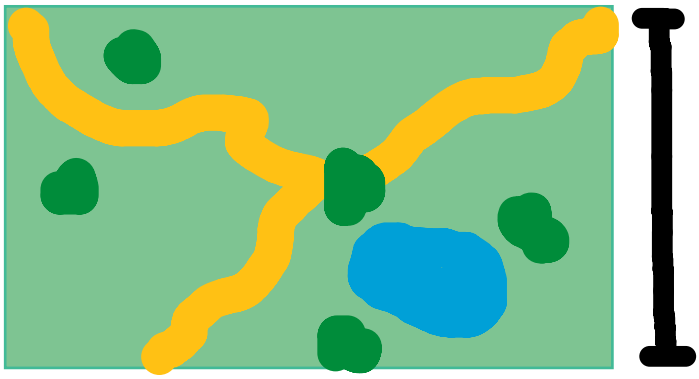
Measurement: Solving Perimeter and Area Problems

- How can you use line perimeter and area to solve problems?

Perimeter is the distance around a figure.
Area is the amount of surface a figure covers.
What is the area of the new state park?



Length = ?

Perimeter = 36 miles

Width = 7 mi.

Step One: Answer the hidden question.
Area = length x width
THINK: I know only the width. The hidden question is, "What is the length of the park?" I can use what I know to find the length.

- Add the two known sides, since opposite sides of a rectangle are equal.
  7 + 7 = 14
- Subtract the total of the two known sides from the perimeter to find the total of the two unknown sides. 36 – 14 = 22
- Divide to find the length of one side. 22 / 2 = 11 The length of the park is 11 miles.

Step Two: Use the answer to the hidden question to answer the original question.

Length = 11 miles

Width = 7 miles

Area = Length x Width
= 11 x 7
= 77

The area of the park is 77 square miles.