## Functions and Graphs

The purpose of these activities is to better understand functions and their graphs.

Every square has both a perimeter p and an area A. In other words, there is a relationship between the set of perimeters of squares and the set of areas of squares. Is this relationship a function?

**Exercise 1** If 
$$p = 20$$
, then  $A = \boxed{25}$ .

Hint: What is the side length of a square with this perimeter?

**Exercise 2** If 
$$A = 36$$
 then  $p = \boxed{24}$ 

Hint: What is the side length?

**Solution** If the area is 36, then the side length must be 6, since  $6 \times 6 = 36$ . The perimeter is 4 times the side length, so the perimeter is 24.

This is the end of the activity.

Learning outcomes: