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.

In the two exercises above, was there more than one answer? Would there ever be more than one answer?

Learning outcomes: