

Functions and Graphs

The purpose of these activities is to better understand functions and their graphs. But really to practice with Ximera.

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.

Exercise 3 In the two exercises above, was there more than one answer? Would there ever be more than one answer?

Multiple Choice:

- (a) yes
- (b) no ✓

Explain:

This is the end of the activity. Really.

Learning outcomes: