

Chapter 1 (p. 6, 1-1)

element

element: An item in a set.

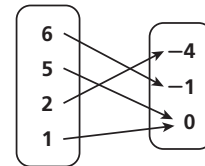
4 is an element of the set of even numbers.

$$4 \in \{\text{even numbers}\}$$

Chapter 1 (p. 45, 1-6)

function

function: A relation in which every input is paired with exactly one output.



Chapter 1 (p. 67, 1-9)

parent function

parent function: The simplest function with the defining characteristics of the family. Functions in the same family are transformations of their parent function.

$$f(x) = x^2 \text{ is the parent function for } g(x) = x^2 + 4 \text{ and } h(x) = 5(x + 2)^2 - 3.$$

Chapter 1 (p. 21, 1-3)

radical symbolradical symbol: The symbol $\sqrt{\quad}$ used to denote a root. The symbol is used alone to indicate a square root or with an index, $\sqrt[n]{\quad}$, to indicate the n th root.

$$\sqrt{36} = 6, \sqrt[3]{27} = 3$$

Chapter 1 (p. 44, 1-6)

range

range: The set of output values of a function or relation.

The range of $y = x^2$ is $\{y \mid y \geq 0\}$.

Chapter 1 (p. 6, 1-1)

set

set: A collection of items called elements.

$\{1, 2, 3\}$

Chapter 1 (p. 6, 1-1)

subset

subset: A set that is contained entirely within another set. Set B is a subset of set A if every element of B is contained in A , denoted $B \subset A$.

The set of integers is a subset of the set of rational numbers, denoted $\mathbb{Z} \subset \mathbb{Q}$.

Chapter 1 (p. 59, 1-8)

transformation

transformation: A change in the position, size, or shape of a figure or graph.

