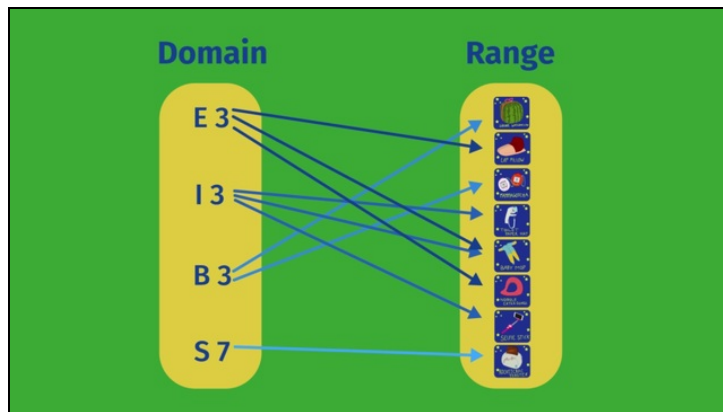




Printable Worksheets from [sofatutor.com](https://www.sofatutor.com)

What is a Function? The Difference between Functions and Relations



- 1 Find three main facts about functions.
- 2 Describe Herman's problems with the vending machine.
- 3 Explain the difference between functions and relations.
- 4 Decide which mapping diagrams represent a function.
- 5 Identify which statements are describing a function.
- 6 Determine if the assignment is a function or relation.
- + with lots of tips, answer keys, and detailed answer explanations for all of the problems.



The complete package, including all problems, hints, answers, and detailed answer explanations is available for all [sofatutor.com](https://www.sofatutor.com) subscribers.



Find three main facts about functions.

Fill in the blanks.

output unique range input domain output input

- 1 There is a set of all¹ values x , called the².
- 2 A function $f(x)$ changes an³ value x into a⁴⁵ value y .
- 3 The set of all⁶ values y is called the⁷.

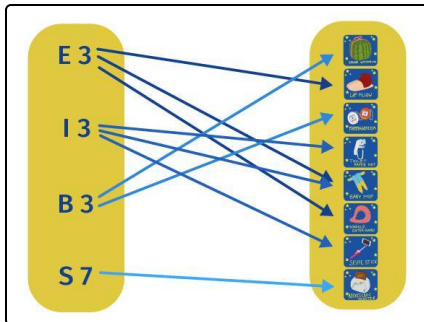


Hints for solving these problems

1
of 6

Find three main facts about functions.

Hint #1



Each element of the left set is assigned to one element of the right set.

Hint #2

The following is an example of a function:

you \rightarrow your age.

Hint #3

Keep in mind that not every relation is a function. For example:

you \rightarrow the names of all your friends.



Answers and detailed answer explanations for these problems

1
of 6

Find three main facts about functions.

Answer key: 1: input // 2: domain // 3: input // 4: unique // 5: output // 6: output // 7: range

There are three main facts about functions:

1. There is a set of all input values x , called the domain.
2. A function $f(x)$ changes an input value x into a unique output value y .
3. The set of all output values y is called the range.