**FUNCTIONS GRADE 10**

**Function**

A function is a mathematical relationship between two variables, where every input variable has one output variable.

**Representations of functions**

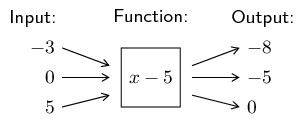
Functions can be expressed in many different ways for different purposes.



Words: “The relationship between two variables is such that one is always 55 less than the other.”



Mapping diagram:



1. Table

|  |  |  |  |
| --- | --- | --- | --- |
| Input | -3 | 0 | 5 |
| Output | -8 | -5 | 0 |



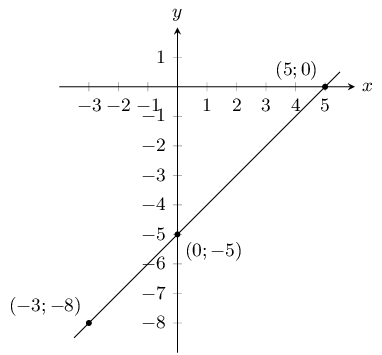
Set of ordered number pairs: (−3; −8), (0; −5), (5; 0)



Algebraic formula:



Graph:



**EXERCISE 1**

1. Given that , complete the input and output diagram below:

Input: Function: Output:

-1

0

1

1. Given that

|  |  |  |  |
| --- | --- | --- | --- |
| Input | -2 | 0 | 2 |
| Output |  |  |  |