5.2 Properties of Functions
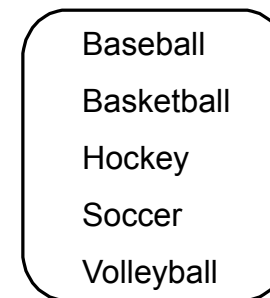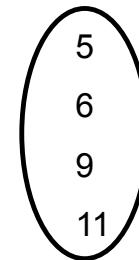
* In a [＿＿＿＿], the set of the [＿＿] elements are called the [＿＿＿＿]; the set of the [＿＿＿＿] elements are called the [＿＿＿＿]

* A [＿＿＿＿] is a relation where each element of the domain is associated with [＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿]

ex.

ex.

France
Togo
Niger
Finland
Vietnam

Europe
Asia
Africa

5
6
9
11

Baseball
Basketball
Hockey
Soccer
Volleyball
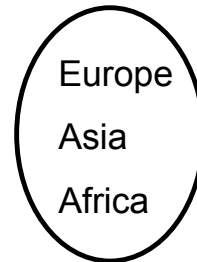
* The [＿＿＿＿] represents the set of input values. The [＿＿＿] represents the set of [＿＿＿＿] values. On the cartesian plane, the values on the [＿＿＿＿] [＿＿＿＿] on the [＿＿＿] values on the [＿＿＿] Thus, the [＿＿＿] values are [＿＿＿＿＿＿＿] of the output values.

* For functions with numeric

values, we use [＿＿＿＿＿＿]

ex. area of a disc

A(r) =

Associations

ex. The equation $V = -0.08d + 50$ represents the volume, V litres, of gas remaining in a vehicle's tank after travelling d kilometres. The gas tank is not refilled until it is empty.

a) Describe the function.
   Write the equation in function notation.

b) Determine the value of $V(600)$.
   What does this number represent?

c) Determine the value of d when $V(d) = 26$.
   What does this number represent?

CHECK YOUR UNDERSTANDING

3. The equation $C = 25n + 1000$ represents the cost, C dollars, for a feast following an Arctic sports competition, where n is the number of people attending.

   a) Describe the function. Write the equation in function notation.

   b) Determine the value of $C(100)$. What does this number represent?

   c) Determine the value of n when $C(n) = 5000$. What does this number represent?

Quiz in 2 days

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