

Range

# Math 1030 #13b

Domain

## Functions: Building Blocks of Mathematical Modeling

Dependent  
Variable

### Domain and Range

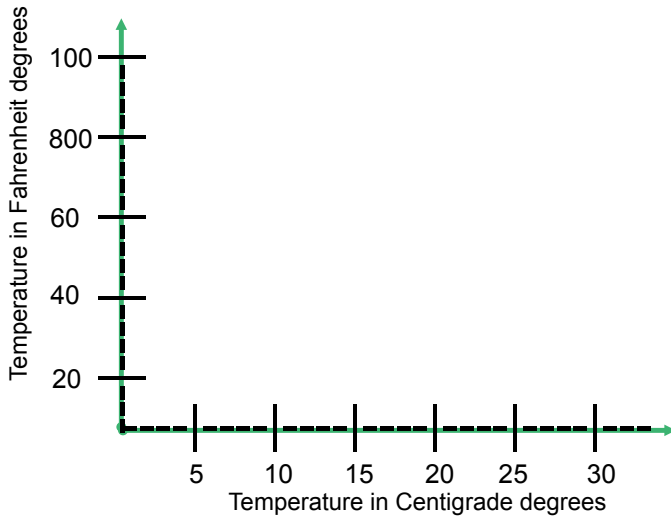
Independent  
Variable

## Representing Functions

- 1) Numerically - in a table
- 2) Graph - a picture (is worth 1000 words)
- 3) Equation

Temperature

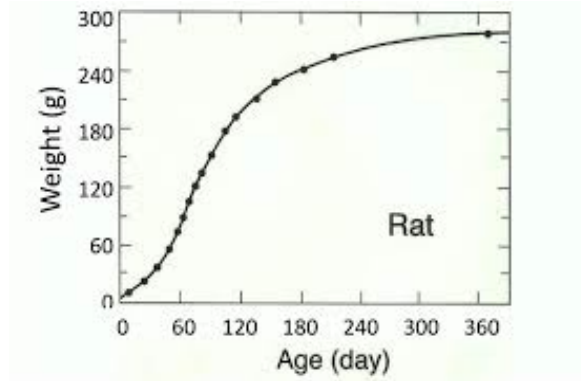
°C	°F
0	32
10	50
20	68
30	86



Domain - the set of values that both make sense and are of interest for the independent variable.

Range - the values of the dependent variable that correspond to the values in the domain.

EX 1: Consider this graph.



a) Identify the independent and dependent variables and describe the domain and range.

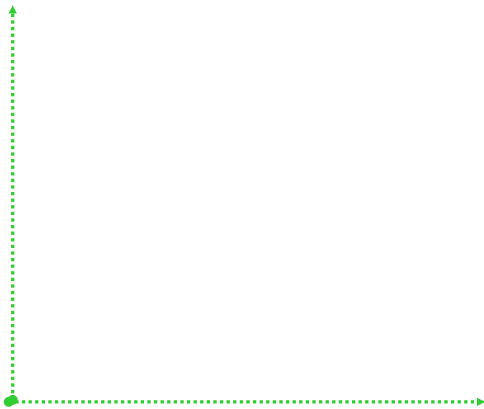
b) Describe the function in words.

EX 2: Consider this table.

Altitude (ft)	Boiling point of Water (°F)
0	212.0
2,000	208.4
4,000	204.8
6,000	201.0
8,000	195.5

a) Identify the independent and dependent variables and describe the domain and range.

b) Make a clear graph of the function.



c) Describe the function in words.