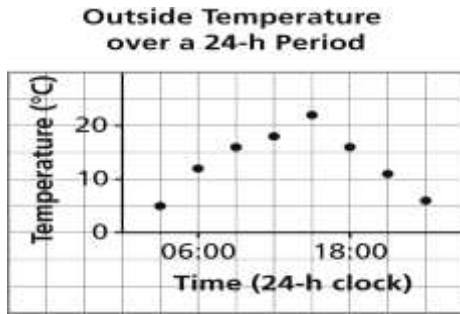# FPC 10
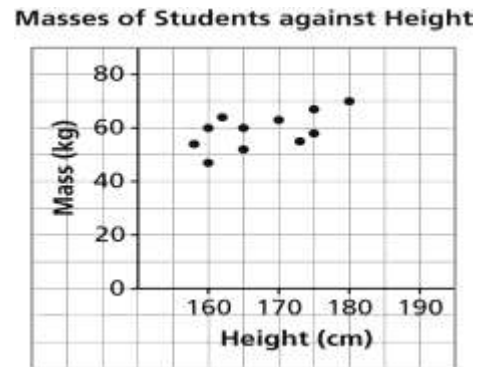## 4.4 – Graphs of Functions & Domain and Range

1. Which of these graphs represents a function? Justify your answer.
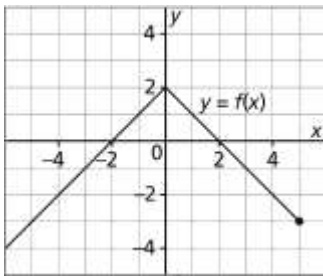
a)

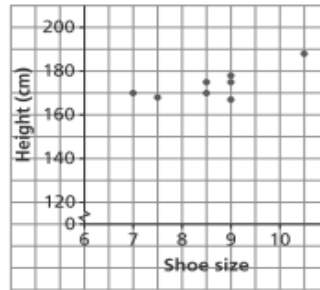**Outside Temperature over a 24-h Period**

Temperature (°C) vs Time (24-h clock)

b)

Masses of Students against Height

Mass (kg) vs Height (cm)

2. Determine if each of the following are functions or not, and find domain and range.

$y = f(x)$

Height (cm) vs Shoe size

Function?

Domain:

Range:

Function?

Domain:

Range:

$y = g(x)$

World Population

World population (billions) vs Year
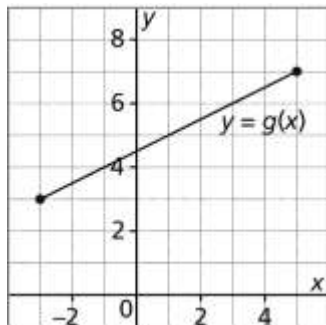
Function?
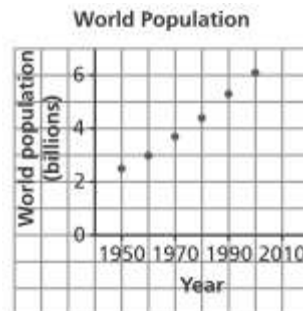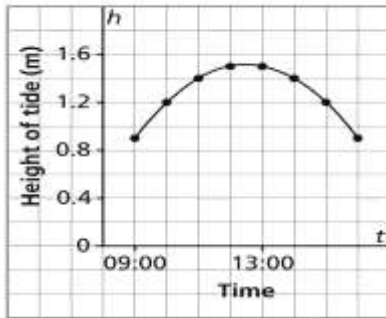
Domain:

Range:

**Function?**

Domain:

Range:

3. This graph shows the approximate height of the tide, h metres, as a function of time, t, at Port Clements, Haida Gwaii on June 17, 2009.

Height of Tide at Port Clements, June 17, 2009

a) Identify the dependent variable and the independent variable. Justify your choices.

b) Why are the points on the graph connected? Explain.

c) Is this relation a Function? Determine the domain and range of the graph.

4. Here is a graph of the function $g(x) = 4x - 3$.

$g(x) = 4x - 3$
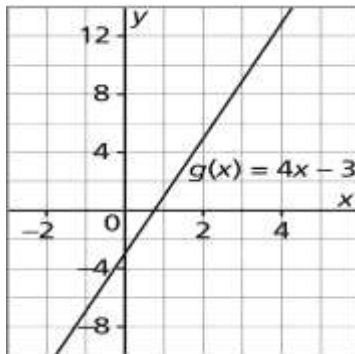
a) Determine the range value when the domain value is 3 or _____

b) Determine the domain value when the range value is −7 or _____

Assignment 4.4: Page 293: #3 – 13, 16, 17, 19