## BA SANGAM COLLEGE YEAR 10 MATHEMATICS WORKSHEET 4

## **STRAND 1 - FUNCTION**

- 1. From the relation  $W = \{(M, B), (A, O), (T, O) (H, K)\}$ . State the:
  - a. domain
  - b. range
- 2. Given a function g(x) = 2x + 4
  - a. Evaluate g (3)
  - b. For what values of x is g(x) = 10
- 3. State the domain and range of the following graphs





4. A relation is given by the rule y = x + 3, where  $x \in I$ .

Copy and complete the table

X	-2	-1	0	1
У				

b.

- 5. A relation is given by  $\{(2,1),(3,2),(4,3)(5,4)\}$ 
  - a. Write the relation as an equation
  - b. List the function as an arrow diagram
- 6. Given Point A = (-2, 0) and Point B = (0, 4).

a) find the gradient of the line joining point A and B. *Sangam Education Board – Online Resources* 

- b) Find the equation of the line joining point A and B.
- 7. From the graph shown on the right, find the:



- a. coordinates of x- intercept
- b. coordinates of y- intercept
- c. Gradient
- d. Equation of the line
- 8. Given the inequation  $y \le 2x + 3$ 
  - a. Find the x and y intercepts
  - b. Sketch the graph of the inequation
- 9. The graph of a relation g(x) is given below.



- i. What is the value of g (1) ?
- ii. Solve for x if g(x) = 0