Worksheet 1.7 – An Intro to Functions – Textbook pages 46-52

LEVEL 1

Do the following input / output tables represent a function? If no, explain why.

1)

Input	Output
2	10
4	12
6	10
8	12

2)

Input	Output
9	0
8	0
7	0
6	0

3)

Input	Output
1	1
2	2
2	3
3	4

LEVEL 2

Make an input / output table for the functions below. Use 0, 1, 2, and 3 as the domain values.

4) $y = 4x$

5) $y = 2x + 5$

6) $y = 20 - 3x$

LEVEL 3

Make an input / output table for the functions below. Use 2, 2.5, 4, 5, and 5.5 as the domain values.

7) $y = 3x + 1.5$

8) $y = x^2 - 2.5$

LEVEL 4

9) You join an aerobics class at the local gym. The cost is $3 per class plus $10 for the initial membership fee.

    a) Write an equation that shows the relationship between the number of classes n you attend and the amount you pay p.

    b) Evaluate the equation for $n = 1, 2, 5, 8$ and 10. Organize your results in an input/output table.

    c) Describe the domain and range of the function whose values are shown in the table.