

Patterns and Relations – Graphing Worksheet

1. a) Use grid paper to graph each table
- b) Find the Pattern Rule that relates the Input to the Output
- c) Change the Pattern Rule into an Expression

a)

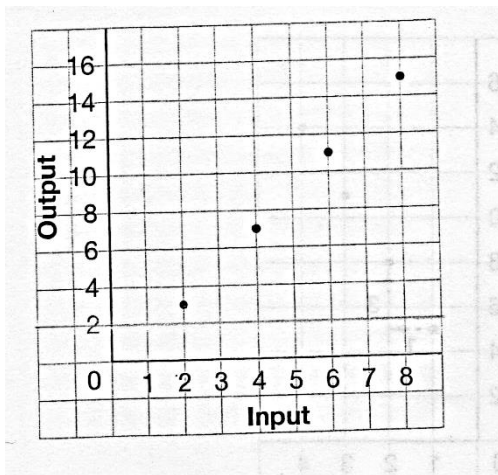
Input	Output
1	3
2	6
3	9
4	12

b)

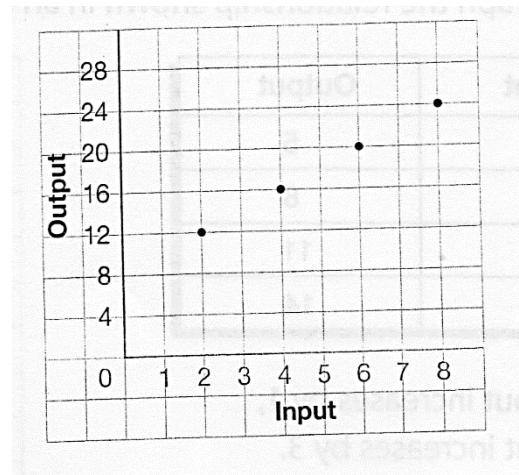
Input	Output
1	5
2	6
3	7
4	8

2. For each graph, make an Input/Output Table. Then determine the Pattern Rule and write the pattern rule as an expression

A)



B)



3. a) Use grid paper to graph the data in the table.
- b) Write an expression to represent the pattern.
- c) Use substitution to find the number of shapes in the 8th figure.
- d) Use substitution to find the number of shapes in the 18th figure.

Figure Number	Number of Shapes
1	1
2	6
3	11
4	16
5	21

4. a) Make an Input/Output Table to represent the graph.
- b) Write an expression to represent the pattern.
- c) Use substitution to find the number of counters in the 7th figure.
- d) Use substitution to find the number of counters in the 23rd figure.

