UNIT I Worksheet 1: GRAPHING PRACTICE

For each data set below, determine the mathematical expression. To do this, first graph the original data. Assume the 1st column in each set of values to be the **independent** variable and the 2nd column the **dependent** variable. Then taking clues from the shape of the first graph, modify the data so that the modified data will plot as a straight line. Using the slope and y-intercept of the stright-line graph, write an appropriate mathematical expression for the relationship between the variables. Be sure to include units!

Data set 1

V (m^3)	P (pa)
.1	40
.5	8
1	4
2	2
4	1
5	.8
8	.5
10	.4

Mathematical expression #1

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Data set 2

t (s)	x (m)
.1	.03
.2	.12
.5	.75
1	3
2	12
3	27
4	48
5	75

Mathematical expression #2

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Data set 3

A (months)	W (lbs)
1	7
2	9.4
3	10.5
4	12.0
5	13.0
6	14.3
7	15.2
8	16.7

Mathematical expression #3

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Data set 4

t (s)	v (m/s)
.3	10
1.2	20
2.7	30
4.8	40
7.5	50
10.8	60
14.7	70
19.2	80

Mathematical expression #4

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