Algebraic Reasoning
Name:_____

Per:_____

POINTS:____

Homework #16 Quiz

Be sure to include your work when appropriate.

Determine whether the set of data represents
a linear, exponential, quadratic or cubic
function.

1.

x	y
0	-8
1	3
2	44
3	145
4	336
5	647

2. Use finite differences to determine the
   function that relates the variables.

x	y
0	3
1	7
2	1
3	-27
4	-89
5	-197

3. Write a function using finite differences that models the data in the table.

LEVEL, x	TOTAL NUMBER OF SOCCER BALLS, y
1	1
2	4
3	10
4	20
5	35
6	56

4. What does the range (y-values) of the function represent in the situation?