Algebra I
Linear, Quadratic or Exponential

Name: _____

Date: _____

Hour: _____

Below you are given several situations that are either linear, quadratic, exponential or neither. If they are linear, quadratic or exponential tell how you know and write a function for the situation. If they are neither tell why not.

1)   The fine of a ticket for speeding is based on how fast the driver is going. The fine is $90.00 plus $7.00 for each mile over the speed limit the car is traveling.

2)   A company is offering a sale on air conditioners. The price is based on how many days the sale runs for. A table of the price is given below.

Day	1	2	3	4	5	6
Price ($)	$400.00	$390.00	$370.00	$340.00	$300.00	$250.00

3)   The population of bugs triples every 9 days.

4)   A shipping company charges $10.00 per package plus $5.00 per pound.

5)   You join an online music download organization below is the chart of your costs.

Number of CD's Ordered	0	1	2	3	4	5
Cost	$15.00	$17.00	$19.00	$21.00	$23.00	$25.00

6)   A circle is cut by a number of straight cuts (not necessarily all through the center). The number of pieces is given in the following table.

Number of Cuts	0	1	2	3	4
Number of Pieces	1	2	4	7	11