Algebraic Reasoning

Name:_____

Per:_____

POINTS:____

Homework #12 Quiz

Be sure to include your work when appropriate.

Calculate the average ratio between successive y-values.

1.

x	y
0	425.6
1	766.08
2	1225.73
3	2083.74
4	3750.73

2.
identify whether the data shows exponential growth or exponential decay. Then determine an exponential function to model the situation.

1-YEAR INTERVAL, x	YEAR	SQUIRREL POPULATION, y
0	2005	62
1	2006	87
2	2007	113
3	2008	170
4	2009	204
5	2010	265

Use the data set to generate an exponential model.

3.

1-YEAR INTERVAL, x	YEAR	VALUE OF CAR, $f(x)$
0	2007	$29,870
1	2008	$24,180
2	2009	$20,480
3	2010	$17,420
4	2011	$14, 585
5	2012	$12,124

4.

NUMBER OF WEEKS SINCE MARKETING ON THE INTERNET, x	TOTAL NUMBER OF RIBBONS SOLD, $f(x)$
0	310
1	336
2	365
3	388
4	425
5	445
6	496