

Name _____
Algebra II

Using the cable TV data provided (for basic cable), answer/do the following:

Plot the data on the included graph paper, then list the following models and associated correlation co-efficients for the data:

1) Linear

2) Quadratic

3) Cubic

4) Quartic

5) Which is the best model? Why?

6) Using the best model, please make a prediction for the years: 2011, 2012, 2013 and 2015

- 7) How accurate do you expect your model to be the further you move away from the survey data? Explain? What factors influence this? What would you need to do to improve your predictions after several years?

Basic Cable

Year	Millions
75	2
76	4.4
77	6.5
78	9.4
79	13.9
80	18.1
81	22.5
82	27.2
83	31.4
84	34.2
85	36.7
86	39.7
87	42.6
88	45.7
89	49.3
90	51.7
91	53.4
92	55.2
93	57.2
94	59.5
95	61.6
96	63
97	64.2
98	65.1
99	65.9
0	66.6
1	66.9
2	66.1
3	66
4	65.4
5	65.4
6	65.4
7	64.9
8	63.7
9	62.1
10	59.8