

Notes 15.3 Fitting Polynomial Functions to Data

1. What kind of function does this appear to be?

X	Y
-1	80
0	44
1	38
2	50
3	68

Write the equation algebraically.

2. A store carries various sizes of TVs. The price for a TV is a function of the screen size, measured in inches along the diagonal. X is screen size, Y is the price in dollars.

X	Y
2	160
5	100
7	120
12	250
17	220
21	200
27	340
32	680
35	1100

- a) Make a scatterplot of the data. What kind of function does this appear to be?
- b) Do a regression test to find appropriate equation.
- c) Based on this model of best fit, \hat{y} , which size TV is most overpriced? (to find the residuals calculate $y - \hat{y}$ in L3)