

HOMEWORK: SCATTER PLOTS USING MS EXCEL

PROBLEM 1:

An entrepreneur purchases dress shirts from China at a price of \$2. She wants to sell them on the Internet (E-Commerce) and decides to try different prices to see whether price affects quantity demanded. Using the data below, draw a scatter plot (also called scatter diagram). Since demand curves traditionally show price as the Y-axis, and Q-demanded as the X-axis, the first column is Q-demanded.

Do you think there is a relationship between Price and Q-demanded? What kind of relationship?

Quantity Sold	Price of Shirts
400	\$ 5.00
390	\$ 6.00
410	\$ 7.00
375	\$ 8.00
350	\$ 9.00
380	\$ 10.00
340	\$ 11.00
300	\$ 12.00
310	\$ 13.00
290	\$ 14.00
280	\$ 15.00
295	\$ 16.00
220	\$ 17.00
250	\$ 18.00
200	\$ 19.00
240	\$ 20.00
160	\$ 25.00
150	\$ 30.00
140	\$ 36.00
110	\$ 40.00

PROBLEM 2:

A company that manufactures small lathes is interested in establishing standards for employees. A random sample of 18 employees is selected in order to develop the standards. The data collected is below.

- (a) What are the mean and median assembly times for the 18 employees?

- (b) A manager at the firm feels that assembly time is related to intelligence. She feels that employees who did well in high school (as measured by high school averages) should be able to do the job faster. Does the data support her hunch?

high school average	Time to assemble lathe (minutes)
50	52
62	53
65	62
68	70
71	76
73	78
75	80
79	80
80	85
82	86
83	90
85	94
88	100
90	102
92	111
94	120
97	135
100	162