The following data represent revenues in thousands of dollars for a manufacturer of small electric appliances.

a. Calculate the moving averages for this time series.

Moving

Year Quarter Revenues Q Average

1996 1 514 1

1996 2 822 2

1996 3 648 3

1996 4 976 4

1997 1 616 5

1997 2 884 6

1997 3 678 7

1997 4 996 8

1998 1 658 9

1998 2 850 10

1998 3 714 11

1998 4 1052 12

b. Find the seasonal index for each quarter.

Quarter Seasonal index

1

2

3

4

c. From the fourth quarter of 1997 to the first quarter of 1998, revenues declined.

What happened on a seasonally adjusted basis?

d. From the first quarter of 1998 to the second quarter of 1998, revenues increased. What

happened on a seasonally adjusted basis?

e. The regression equation to predict the long term trend in the seasonally adjusted

revenues. Seasonally adjusted revenues = 705.97 + 11.67\*Q

f. Compute the seasonally adjusted forecast for the fourth quarter of 2001.

g. Compute the forecast for the second quarter of 2002.