

MATU9D2: PRACTICAL STATISTICS

Spring 2017

PRACTICAL SESSION 5

- Time Series

Computing Science & Maths

University of Stirling

**ANSWER THE FOLLOWING QUESTIONS USING PEN, PAPER AND
CALCULATOR - NOT COMPUTER**

1. A company's sales (£000's) has been monitored for 4 years, giving the following information :

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
1	23	14	12	20
2	28	18	15	24
3	32	22	19	26
4	38	25	23	32

- (a) Plot the data
- (b) Calculate the 'smoothed' curve using the centred moving average method and plot this on your graph.
- (c) Calculate the seasonal variation and hence the seasonally adjusted data. Plot this on your graph.
- (d) Comment.