Bivariate Data Computer room Session 2 Investigating unusual points

1. Use the data set CIA Life expectancy. Explanatory variable is ‘Births/Woman’. Response variable is ‘Life Expectancy’

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| 1 Draw a scatter plot using the whole data set. | 9 Which point is unusual? Draw a scatter plot with the unusual point removed. |
| 2 State the variables with units. Explain why Births/Woman is the explanatory variable. | 10.Add a linear trendline  Write down the equation of this line |
| 3 Describe what you see. (TASgu) | 11 Compare this line with the one fitted to the full set of data. |
| 4 Add a linear trendline.  Write down the equation of this line. | 12 Find the correlation coefficient, r. Compare this value to the r value for the full set of data. |
| 5 Explain the trend in context. | 13 Make a prediction for the same explanatory value. |
| 6 State the gradient of the fitted line including units and interpret this. | 14 How does this prediction compare to the previous one? |
| 7 Find the correlation coefficient, r. Comment on what it tells you. |
| 8 Make a prediction from within the range of data values. |

1. Use the data set Blood pressure. Explanatory variable is ‘First reading. Response variable is ‘Second reading’

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