**Further Mathematics Practice SAT 4**

The prices of 1 litre of milk has been collected over a 5-year period and is presented in the table.

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| **Season** | **2010** | **2011** | **2012** | **2013** | **2014** |
| Summer | 1.55 | 1.60 | 1.50 | 1.60 | 1.45 |
| Autumn | 1.50 | 1.55 | 1.50 | 1.45 | 1.40 |
| Winter | 1.65 | 1.75 | 1.70 | 1.70 | 1.60 |
| Spring | 1.70 | 1.80 | 1.75 | 1.80 | 1.65 |

1. Calculate the seasonal indices.
2. Deseasonalise the data using the seasonal indices.
3. Plot the original and deseasonalised data.
4. Comment on your results, supporting your statements with mathematical evidence.
5. Use the deseasonalised data to find the equation of the straight line for the deseasonalised data using the least-squares regression method.
6. Predict the current price of 1 litre of milk from this equation.
7. When will milk be priced below a seasonally adjusted price of $1.50 if this trend continues?