Year 12 Essential Mathematics Unit 3

Statistical Investigation Validation

Using Bivariate Data

**Total Marks: /25 Weighting: 10%**

A group of 30 people were asked to record the number of cans of soft drink that they consumed per month, and to disclose their yearly salary. The collected data is listed below.

|  |  |  |  |
| --- | --- | --- | --- |
| Soft Drinks Consumed | Income level ($ thousands) | Soft Drinks Consumed | Income level ($ thousands) |
| 25 | 30 | 4 | 200 |
| 24 | 50 | 21 | 80 |
| 20 | 72 | 13 | 105 |
| 15 | 94 | 14 | 90 |
| 12 | 18.5 | 2 | 220 |
| 14 | 52 | 10 | 108 |
| 14 | 100 | 12 | 145 |
| 17 | 92 | 14 | 120 |
| 15 | 100 | 16 | 80 |
| 11 | 117 | 20 | 100 |
| 18 | 88 | 8 | 142 |
| 19 | 75 | 8 | 155 |
| 12 | 150 | 12 | 74 |
| 10 | 170 | 11 | 88 |
| 22 | 52 | 4 | 92 |

Use the data provided to answer the question:

**“Does the amount of soft drink you consume affect a persons yearly income?”**