

A company is developing a new flavour of chocolate by varying the quantities of the ingredients. A random selection of 9 flavours of chocolate are judged by two tasters who each give marks out of 100 to each flavour of chocolate.

| Chocolate | <i>A</i> | <i>B</i> | <i>C</i> | <i>D</i> | <i>E</i> | <i>F</i> | <i>G</i> | <i>H</i> | <i>I</i> |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Taster 1 | 72 | 86 | 75 | 92 | 98 | 79 | 87 | 60 | 62 |
| Taster 2 | 84 | 72 | 74 | 95 | 85 | 87 | 82 | 75 | 68 |

Carry out a Wilcoxon matched-pairs signed-rank test at the 10% significance level to investigate whether, on average, there is a difference between marks awarded by the two tasters. [7]