

Version 1.0:01.08



General Certificate of Education

Statistics 6380

SS03 Statistics 3

Mark Scheme

2008 examination - January series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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Key to mark scheme and abbreviations used in marking

| | | | |
|--------------|--|-----|----------------------------|
| M | mark is for method | | |
| m or dM | mark is dependent on one or more M marks and is for method | | |
| A | mark is dependent on M or m marks and is for accuracy | | |
| B | mark is independent of M or m marks and is for method and accuracy | | |
| E | mark is for explanation | | |
| √ or ft or F | follow through from previous incorrect result | MC | mis-copy |
| CAO | correct answer only | MR | mis-read |
| CSO | correct solution only | RA | required accuracy |
| AWFW | anything which falls within | FW | further work |
| AWRT | anything which rounds to | ISW | ignore subsequent work |
| ACF | any correct form | FIW | from incorrect work |
| AG | answer given | BOD | given benefit of doubt |
| SC | special case | WR | work replaced by candidate |
| OE | or equivalent | FB | formulae book |
| A2,1 | 2 or 1 (or 0) accuracy marks | NOS | not on scheme |
| -x EE | deduct x marks for each error | G | graph |
| NMS | no method shown | c | candidate |
| PI | possibly implied | sf | significant figure(s) |
| SCA | substantially correct approach | dp | decimal place(s) |

No Method Shown

Where the question specifically requires a particular method to be used, we must usually see evidence of use of this method for any marks to be awarded. However, there are situations in some units where part marks would be appropriate, particularly when similar techniques are involved. Your Principal Examiner will alert you to these and details will be provided on the mark scheme.

Where the answer can be reasonably obtained without showing working and it is very unlikely that the correct answer can be obtained by using an incorrect method, we must award **full marks**. However, the obvious penalty to candidates showing no working is that incorrect answers, however close, earn **no marks**.

Where a question asks the candidate to state or write down a result, no method need be shown for full marks.

Where the permitted calculator has functions which reasonably allow the solution of the question directly, the correct answer without working earns **full marks**, unless it is given to less than the degree of accuracy accepted in the mark scheme, when it gains **no marks**.

Otherwise we require evidence of a correct method for any marks to be awarded.

SS03

| Q | Solution | Marks | Total | Comments |
|--------------|--|---|--------------|---|
| 1 | <p>H_0 pop median = £5.60 H_1 pop median \neq £5.60 2 tail 10%</p> <p>Signs - + + + + + + + + - +</p> <p>test statistic $2^- / 10^+ \quad n = 12$</p> <p>$P(\leq 2^-) = 0.0193$ or $P(\geq 10^+) = 0.0193$</p> <p>$0.0193 < 0.05$ for 2 tailed test at 10%</p> <p>Significant evidence at 10% level to reject H_0</p> <p>There is significant evidence to suggest that the median weekly amount of pocket money given to 14 year-old children living in Brighton has changed (increased) since 2003</p> | <p>B1</p> <p>M1</p> <p>A1</p> <p>M1</p> <p>m1</p> <p>A1</p> <p>E1</p> | <p>7</p> | <p>ts correct</p> <p>Bin model seen to be used</p> <p>Comparison of correct B(12, 0.5) prob with 0.05 or use of identified cv</p> |
| Total | | | 7 | |

SS03 (cont)

| Q | Solution | Marks | Total | Comments | | | | | | | | | | | | | | | | | | | |
|---|---|----------------------------|--------------|---|----------------------------|---|---|---|---|---|----|---|----|----|----|---|----|----|----|----|--|----|---|
| 2 | H ₀ Samples are taken from identical populations | B1 | | Hypotheses referring to population averages also acceptable | | | | | | | | | | | | | | | | | | | |
| | H ₁ Samples are not taken from identical populations (rugby players have higher average scores) | B1 | | | | | | | | | | | | | | | | | | | | | |
| | 1 tail 5% | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Golfers ranks</th> <th>Rugby players ranks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>4</td> </tr> <tr> <td>2</td> <td>6</td> </tr> <tr> <td>3</td> <td>7½</td> </tr> <tr> <td>5</td> <td>10</td> </tr> <tr> <td>7½</td> <td>13</td> </tr> <tr> <td>9</td> <td>14</td> </tr> <tr> <td>11</td> <td>15</td> </tr> <tr> <td>12</td> <td></td> </tr> </tbody> </table> | Golfers ranks | | | Rugby players ranks | 1 | 4 | 2 | 6 | 3 | 7½ | 5 | 10 | 7½ | 13 | 9 | 14 | 11 | 15 | 12 | | M1 | Attempt at Mann-Whitney; ranks as one group |
| | Golfers ranks | Rugby players ranks | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 4 | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 6 | | | | | | | | | | | | | | | | | | | | | |
| | 3 | 7½ | | | | | | | | | | | | | | | | | | | | | |
| | 5 | 10 | | | | | | | | | | | | | | | | | | | | | |
| | 7½ | 13 | | | | | | | | | | | | | | | | | | | | | |
| 9 | 14 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 15 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | |
| T _G = 1 + 2 + ... + 12 = 50.5 | M1 | For ties | | | | | | | | | | | | | | | | | | | | | |
| T _R = 4 + 6 + ... + 15 = 69.5 | m1 | | | | | | | | | | | | | | | | | | | | | | |
| U _G = 50.5 - $\frac{8 \times 9}{2}$ = 14.5 | M1 | For U formula correct | | | | | | | | | | | | | | | | | | | | | |
| U _R = 69.5 - $\frac{7 \times 8}{2}$ = 41.5 | | | | | | | | | | | | | | | | | | | | | | | |
| Test statistic U = 14.5 | B1 | Correct/relevant cv used | | | | | | | | | | | | | | | | | | | | | |
| n = 8, m = 7, cv = 13 | M1 | | | | | | | | | | | | | | | | | | | | | | |
| U = 14.5 > 13 | A1 | | | | | | | | | | | | | | | | | | | | | | |
| Accept H ₀ No significant evidence at the 5% level to suggest that the average test score is higher for rugby players | E1 | 10 | In context | | | | | | | | | | | | | | | | | | | | |
| | Total | | 10 | | | | | | | | | | | | | | | | | | | | |

SS03 (cont)

| Q | Solution | Marks | Total | Comments | | | | | | | | | | | | |
|--------------------|--|----------|------------|----------|----------------|--------|-------|-----------------|--------|--------|--------------|-------|-------|---|-----------|---|
| <p>3(a)</p> | <p>H_0 No association between type of victim and type of offence H_1 Association exists between type of victim and type of offence 1 tail 5%</p> <p>Expected frequencies:</p> <table border="1" data-bbox="258 533 683 703"> <thead> <tr> <th></th> <th>Individual</th> <th>Business</th> </tr> </thead> <tbody> <tr> <td>Robbery</td> <td>126.31</td> <td>93.69</td> </tr> <tr> <td>Burglary</td> <td>138.94</td> <td>103.06</td> </tr> <tr> <td>Arson</td> <td>36.75</td> <td>27.25</td> </tr> </tbody> </table> $ts = \sum \frac{(O - E)^2}{E}$ $= \frac{(112 - 126.31)^2}{126.31} + \frac{(108 - 93.69)^2}{93.69} + \dots$ $= 8.013$ <p>$df = 2$ 5% $cv = 5.991$</p> <p>$ts > 5.991$</p> <p>Reject H_0</p> <p>Significant evidence to suggest an association exists between type of victim and type of offence. Individuals much more likely to suffer arson / business much more likely to suffer robbery etc</p> | | Individual | Business | Robbery | 126.31 | 93.69 | Burglary | 138.94 | 103.06 | Arson | 36.75 | 27.25 | <p>B1</p> <p>M1</p> <p>m1</p> <p>m1</p> <p>m1</p> <p>A1</p> <p>B1</p> <p>M1</p> <p>A1</p> <p>E1</p> | <p>10</p> | <p>Independent / not independent: allow B1 once only</p> <p>E method (1dp allowed)</p> <p>for 3 correct</p> <p>for all E correct (SC2 if integers)</p> <p>ts sum with correct denominators</p> <p>ts in range 7.80 – 8.20</p> <p>For cv</p> <p>For comparison ts/cv</p> <p>Any sensible interpretation in context</p> |
| | Individual | Business | | | | | | | | | | | | | | |
| Robbery | 126.31 | 93.69 | | | | | | | | | | | | | | |
| Burglary | 138.94 | 103.06 | | | | | | | | | | | | | | |
| Arson | 36.75 | 27.25 | | | | | | | | | | | | | | |

SS03 (cont)

| Q | Solution | Marks | Total | Comments | | | | | | | | | | | | |
|---------------------|---|--------------------------------------|-------------------|--|-------------------------------------|-------|-------|---------------------|--------|--------|---------------------|----|----|----|--|---------------|
| 3(b)(i) | Expected frequencies: | M1 | | E method | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th></th> <th>Under 25 years</th> <th>25 years and over</th> </tr> </thead> <tbody> <tr> <td>Aggravated</td> <td>3.375</td> <td>5.625</td> </tr> <tr> <td>Simple</td> <td>11.625</td> <td>19.375</td> </tr> <tr> <td>Intimidation</td> <td>18</td> <td>30</td> </tr> </tbody> </table> | | Under 25 years | 25 years and over | Aggravated | 3.375 | 5.625 | Simple | 11.625 | 19.375 | Intimidation | 18 | 30 | m1 | | for 3 correct |
| | | Under 25 years | 25 years and over | | | | | | | | | | | | | |
| | Aggravated | 3.375 | 5.625 | | | | | | | | | | | | | |
| Simple | 11.625 | 19.375 | | | | | | | | | | | | | | |
| Intimidation | 18 | 30 | | | | | | | | | | | | | | |
| | | m1 | 3 | for all E correct (SC2 if integers) | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| (ii) | Pooling necessary because the expected frequency (3.375) for 'Under 25 years' 'Aggravated' assault is below 5 | E1 | 1 | | | | | | | | | | | | | |
| (iii) | 2 assault categories should be pooled – both the same 'type' of offence: assault | E1 | 1 | | | | | | | | | | | | | |
| (iv) | <table border="1"> <thead> <tr> <th></th> <th>Under 25 years</th> <th>25 years and over</th> </tr> </thead> <tbody> <tr> <td>Assaults – simple/aggravated</td> <td>15</td> <td>25</td> </tr> <tr> <td>Intimidation</td> <td>18</td> <td>30</td> </tr> </tbody> </table> | | Under 25 years | 25 years and over | Assaults – simple/aggravated | 15 | 25 | Intimidation | 18 | 30 | | | | | | |
| | | Under 25 years | 25 years and over | | | | | | | | | | | | | |
| | Assaults – simple/aggravated | 15 | 25 | | | | | | | | | | | | | |
| Intimidation | 18 | 30 | | | | | | | | | | | | | | |
| | <p>H_0 No association between age of offender and type of offence</p> <p>H_1 Association exists between age of offender and type of offence</p> <p>1 tail 5%</p> | B1 | | | | | | | | | | | | | | |
| | $ts = \sum \frac{(O - E - 0.5)^2}{E} =$ $\frac{1.5^2}{15} + \frac{1.5^2}{25} + \frac{1.5^2}{18} + \frac{1.5^2}{30}$ <p>= 0.44</p> <p>df = 1 5% cv = 3.841</p> <p>ts < 3.841</p> <p>Accept H_0</p> <p>No significant evidence to suggest an association between age of offender and type of offence</p> | M1 M1 A1 B1 M1 A1 | | For ts correct denominators For Yates' correction For ts 0.2 – 0.50 (SC2 ts = 0.782) For cv For comparison ts/cv In context | | | | | | | | | | | | |
| | Total | | 22 | | | | | | | | | | | | | |

SS03 (cont)

| Q | Solution | Marks | Total | Comments | | | | | | | | | | | | | |
|--|---|-----------------------|------------|-----------------------------|-----------|------|------|------|------|------|----|---|---|----|-----------|----|-----------------|
| 4(a) | H_0 pop median/mean diff $\eta_d = 0$ | B1 | 9 | Consistent with differences | | | | | | | | | | | | | |
| | H_1 pop median/mean diff $\eta_d < 0$ | B1 | | | | | | | | | | | | | | | |
| | 1 tail 5% (d is 2003 – 1999) | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>diff</td> <td>-5.4</td> <td>-3.2</td> <td>-3.8</td> <td>-4.2</td> <td>-2.4</td> </tr> <tr> <td>rank</td> <td>10</td> <td>6</td> <td>8</td> <td>9</td> <td>3</td> </tr> </table> | diff | | | -5.4 | -3.2 | -3.8 | -4.2 | -2.4 | rank | 10 | 6 | 8 | 9 | 3 | M1 | For differences |
| | diff | -5.4 | | | -3.2 | -3.8 | -4.2 | -2.4 | | | | | | | | | |
| | rank | 10 | | | 6 | 8 | 9 | 3 | | | | | | | | | |
| | <table border="1"> <tr> <td>-2.1</td> <td>-3.1</td> <td>+0.3</td> <td>-2.8</td> <td>+3.4</td> </tr> <tr> <td>2</td> <td>5</td> <td>1</td> <td>4</td> <td>7</td> </tr> </table> | -2.1 | | | -3.1 | +0.3 | -2.8 | +3.4 | 2 | 5 | 1 | 4 | 7 | M1 | For ranks | | |
| | -2.1 | -3.1 | | | +0.3 | -2.8 | +3.4 | | | | | | | | | | |
| | 2 | 5 | | | 1 | 4 | 7 | | | | | | | | | | |
| | $T_+ = 1 + 7 = 8$ | m1 | | | For total | | | | | | | | | | | | |
| $T_- = 10 + 6 + \dots + 4 = 47$ | A1 | For one correct total | | | | | | | | | | | | | | | |
| ts $T = 8$ $n = 10$ $cv = 11$ | B1 | For cv | | | | | | | | | | | | | | | |
| $T < 11$ | M1 | Comparison cv/ts | | | | | | | | | | | | | | | |
| Significant evidence at 5% level to reject H_0 and conclude that average teenage conception rate has decreased between 1999 and 2003 | E1 | | | | | | | | | | | | | | | | |
| (b) A matched pairs design eliminates individual differences by comparing conception rates in the same regions for the two years. This means that any particular regional differences will not affect the comparisons and so a difference is more likely to be detected if one exists | B1 | 2 | In context | | | | | | | | | | | | | | |
| | E1 | | | | | | | | | | | | | | | | |
| (c) A Type I error is when a correct H_0 is rejected. In this case it would mean that we conclude that the average conception rate has decreased when, in fact, it has not | B1 | 2 | | | | | | | | | | | | | | | |
| | | | | E1 | | | | | | | | | | | | | |
| | Total | | 13 | | | | | | | | | | | | | | |

SS03 (cont)

| Q | Solution | | | | | | Marks | Total | Comments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------|-----------|---|--|----------------|----------------|---------------|------------------|----------|---|---|---|---------------|---|---|---|---|---|-------------|----------|----------|----------|----------|----------|----------|---------------|---|---|---|----------------|----------------|----|---------------|----|---|----|---|---|---|--|-------------------------------|--|--|
| <p>5(a)</p> <table border="1" data-bbox="258 293 735 770"> <tr> <td>Team</td> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> </tr> <tr> <td>x rank</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>y rank</td> <td>2</td> <td>5</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Team</td> <td>F</td> <td>G</td> <td>H</td> <td>I</td> <td>J</td> <td>K</td> </tr> <tr> <td>x rank</td> <td>6</td> <td>7</td> <td>8</td> <td>$9\frac{1}{2}$</td> <td>$9\frac{1}{2}$</td> <td>11</td> </tr> <tr> <td>y rank</td> <td>10</td> <td>3</td> <td>11</td> <td>9</td> <td>1</td> <td>8</td> </tr> </table> <p>$r_s = 0.355$ (3sf from calc)</p> <p>(b) H_0 Rank orders of gate receipts and player costs are independent</p> <p>H_1 Rank orders of gate receipts and player costs are not independent – there is a positive association</p> <p>1 tail 10%</p> <p>$cv = 0.4182$</p> <p>ts $r_s = 0.355$</p> <p>$r_s < 0.4182$</p> <p>Accept H_0 No significant evidence at 10% level to suggest a positive association between rank orders of gate receipts and player costs</p> | Team | A | B | C | D | E | x rank | 1 | 2 | 3 | 4 | 5 | y rank | 2 | 5 | 4 | 6 | 7 | Team | F | G | H | I | J | K | x rank | 6 | 7 | 8 | $9\frac{1}{2}$ | $9\frac{1}{2}$ | 11 | y rank | 10 | 3 | 11 | 9 | 1 | 8 | | <p>M1</p> <p>M1</p> <p>A1</p> | | <p>Attempt at ranks (can be reversed)</p> <p>For 8 correct</p> |
| | Team | A | B | C | D | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | x rank | 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | y rank | 2 | 5 | 4 | 6 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Team | F | G | H | I | J | K | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | x rank | 6 | 7 | 8 | $9\frac{1}{2}$ | $9\frac{1}{2}$ | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | y rank | 10 | 3 | 11 | 9 | 1 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>B3</p> | <p>6</p> | <p>Or</p> <p>$d = 1, 3, 1, 2, 2, 4, 4, 3, \frac{1}{2}, 8\frac{1}{2}, 3$</p> <p>$\sum d^2 = 141\frac{1}{2}$ B1</p> <p>$r_s = 1 - \frac{6 \times 141\frac{1}{2}}{11 \times 120} = 0.357$ M1A1</p> <p>SC4 0.36</p> <p>SC4 0.318</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>B1</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>B1</p> | | <p>For cv</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>M1</p> | | <p>For comparison ts/cv</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>A1</p> | | <p>$r_s = 0.355$ or 0.357</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>E1</p> | <p>5</p> | <p>In context</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | | | | | | | <p>11</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SS03 (cont)

| Q | Solution | Marks | Total | Comments | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|------------|------------------|--|---|---|---|----|---|---|----|----|---|----|----|---|----|----|---|----|----|---|----|--|--|----|--|-------|
| 6 | H ₀ Samples are taken from identical populations | B1 | | or H ₀ $\eta_{Normal} = \eta_{Depres} = \eta_{MildAlz}$ | | | | | | | | | | | | | | | | | | | | | | | | |
| | H ₁ Samples are not taken from identical populations – population average recall scores differ | B1 | | H ₁ at least two of $\eta_{Normal}, \eta_{Depres}, \eta_{MildAlz}$ differ | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1% 1 tail | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ranks | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>Normal</th> <th>Depression</th> <th>Mild Alzheimer's</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>5</td> <td>1</td> </tr> <tr> <td>14</td> <td>9</td> <td>2</td> </tr> <tr> <td>15</td> <td>10</td> <td>3</td> </tr> <tr> <td>16</td> <td>11</td> <td>4</td> </tr> <tr> <td>17</td> <td>12</td> <td>6</td> </tr> <tr> <td>18</td> <td>13</td> <td>7</td> </tr> <tr> <td>19</td> <td></td> <td></td> </tr> </tbody> </table> | Normal | Depression | Mild Alzheimer's | 8 | 5 | 1 | 14 | 9 | 2 | 15 | 10 | 3 | 16 | 11 | 4 | 17 | 12 | 6 | 18 | 13 | 7 | 19 | | | M1 | | Ranks |
| | Normal | Depression | Mild Alzheimer's | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 8 | 5 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14 | 9 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 | 10 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 16 | 11 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 17 | 12 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 18 | 13 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | m1 | | At least 12 correct | | | | | | | | | | | | | | | | | | | | | | | | |
| $T_{Normal} = 107$ $T_{Depres} = 60$ $T_{MildAlz} = 23$ | | m1 | | Totals | | | | | | | | | | | | | | | | | | | | | | | | |
| $n_{Normal} = 7$ $n_{Depres} = 6$ $n_{MildAlz} = 6$ | | A1 | | Any one correct | | | | | | | | | | | | | | | | | | | | | | | | |
| $\sum_{i=1}^m \frac{T_i^2}{n_i} = \frac{107^2}{7} + \frac{60^2}{6} + \frac{23^2}{6} = 2323.74$ | | m1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $H = \frac{12}{19 \times 20} \times 2323.74 - (3 \times 20) = 13.38$ | | A1 | | ts correct 13.0 – 13.8 | | | | | | | | | | | | | | | | | | | | | | | | |
| Critical value from $\chi_2^2 = 9.210$ | | B1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H > 9.210 | | M1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sig evidence to reject H ₀ and conclude that samples are not from identical populations | | A1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Significant evidence at the 1% level to suggest that the population average recall scores differs for the three categories of adults: at least two of the averages differ. It appears that those adults with Mild Alzheimer's disease have a significantly lower average recall score than those who have normal memory function | | E1 | 12 | Difference in context Mention of 'at least two' or a significant difference between scores for Mild Alzheimer's and those with normal memory function | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | | 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TOTAL | | 75 | | | | | | | | | | | | | | | | | | | | | | | | | |