Q1. The stem and leaf diagram shows information about the ages, in years, of the people on a fairground ride.

| 0 | 8 | 8 | 9 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 1 | 2 | 3 | 4 | 4 | 4 | 6 | 7 |
| 2 | 1 | 2 | 3 | 4 | 5 | 6 | 8 |  |
| 3 | 1 | 4 | 8 |  |  |  |  |  |
| 4 | 2 | 3 | 6 | 8 |  |  |  |  |
| 5 | 0 | 3 |  |  |  |  |  |  |

Key: $4 \mid 2$ means 42 years
(a) How many people were on the fairground ride?
(b) Work out the median age.
(c) Work out the range of the ages.

M1.

|  | Working | Answer | Mark | Additional Guidance |
| :--- | :--- | :---: | :---: | :--- |
| (a) |  | 27 | 1 | B1 cao |
| (b)$(27+1) / 2=14$ so 14th <br> s median value | 23 | 1 | B1 cao |  |
| (c) $53-8$ | 45 | 2 | M1 for 53 - 8 <br> A1 cao <br> [SC: B1 for 8 to 53 or 8 - 53 oe or 8 and <br> 53 identified if M0 A0 awarded] |  |

Part (a) was generally correctly answered, careless rather than conceptual errors accounting for the greater number of mistakes.

Part (b) was poorly answered, clearly showing a lack of understanding of the ordering of information in a stem and leaf diagram. 3 and 22.5 were the most common errors here.

Only a half of the candidature was able to correctly find the range in part (c).
$50-8=42$ and $53-9=44$ were the usual errors together with $5-0=5$. Even when the readings of 53 and 8 were correctly achieved many didn't appreciate that they needed the difference and merely stated the two extremities.

