

MEAN, MEDIAN AND MODE APPLICATIONS X-FACTOR WINNER



Guy, Shannon and Yolngu are all contestants in the X-Factor competition.

The table below contains the number of votes each contestant received over 10 weeks. The votes are in thousands.

| WEEKS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------|----|----|----|----|-----|----|----|----|----|----|
| Guy | 72 | 74 | 67 | 78 | 71 | 50 | 85 | 76 | 77 | 77 |
| Shannon | 71 | 72 | 72 | 73 | 74 | 75 | 72 | 76 | 77 | 77 |
| Yolngu | 80 | 82 | 73 | 77 | 500 | 40 | 56 | 70 | 90 | 90 |

Q1. Find the mean number of votes for each contestant.

Q2. Find the median number of votes for each contestant.

Q3. Find the mode for each contestant.

Q4. Which measure of central tendency – mean, median or mode – would be best suited to finding the competition winner?

ANSWERS

Q1,2,3. The votes are in thousands.

| | Mean | Median | Mode |
|---------|-------|--------|------|
| Guy | 72.7 | 75 | 77 |
| Shannon | 73.9 | 73.5 | 72 |
| Yolngu | 115.8 | 78.5 | 90 |

Q4. When there is an outlier (e.g. Yolngu 500), the median is better.