

Example 2

The following data shows Elsie's test results for the last 8 tests in her science class (all in %):

87	93	88	76
65	72	12	91

- a) Calculate Elsie's mean test mark. $\text{mean} = \frac{\text{sum of all scores}}{\text{number of scores}}$
- $$\bar{x} = \frac{584}{8} \Rightarrow \underline{\underline{73\%}}$$
- b) Calculate Elsie's trimmed mean test mark, if you trim the top and the bottom score.
- Remove the lowest score (12) and the highest score (93).
 - Find the mean of the remaining scores: $\frac{87+88+76+65+72+91}{6} = \underline{\underline{79.83\%}}$
- c) Which mean (normal or trimmed) do you think is a better indication of Elsie's test performance for this class? Justify your answer.

The trimmed mean is a better indication of Elsie's performance because most of her test scores are between 72% and 93%.

Example 3

Your friend Denise was trying to calculate the trimmed mean of the following data:

68	17	67	93	75	81
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Her work is shown here:

68	17	67	93	75	81
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$$17 + 67 + 93 + 75 = 252$$

$$252 \div 4 = 63$$

The problem is that her answer of 63 does not match the answer key! What error did Denise make?

- Denise did not remove the lowest score and the highest score.
- Denise should have put the numbers in order from lowest to highest, then find the mean.
- So, Denise should have removed 17 and 93.