

How would you score it?

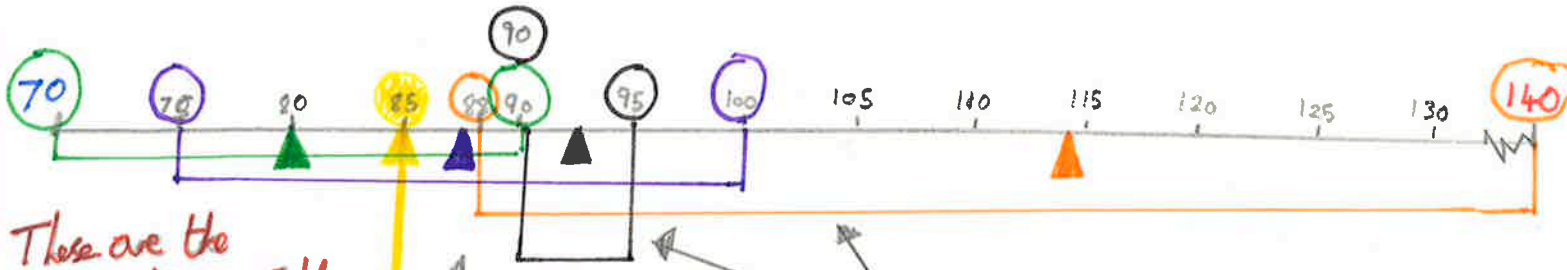
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Problem:

The initial problem was that there was a weight guessing competition, and five people guessed. We had to decide who's guess deserved the prize and what was a fair scoring system to judge it. The correct weight was 88 kg.

- | | |
|----------|--------------------|
| 1. Guess | Between 70-90 kg. |
| 2. Guess | Between 75-100 kg. |
| 3. Guess | Between 98-140 kg. |
| 4. Guess | Between 90-95 kg. |
| 5. Guess | 85 exactly kg. |

How did I solve it:



These are the medians of the ranges.

▲	114	R	52
▲	87.5	R	25
▲	80	R	20
▲	85	R	0
▲	92.5	R	5

These are all the ranges of the different guesses

What was the fairest scoring system?

The fairest scoring system was this one (the one you see on your right) because it not only used both bits of data (the median and the range) it used them together so they worked with each other.

Start with 100.

$(100 + \text{range}) + \text{Difference between median and correct answer}$

- Green square: $(100 + 20) + 8 = 128$
- Purple square: $(100 + 25) + 0.5 = 125.5$
- Orange square: $(100 + 52) + 26 = 178$
- Black square: $(100 + 5) + 4.5 = 109.5$
- Yellow square: $(100 + 0) + 3 = 103$

The answer which is the closest back to 100 wins.

THE WINNER IS...

Person 5: Yellow