Info Gap: Comparing Populations

Problem Card 1

A chewing gum company records the amount of time, in minutes, it takes for a person to find that the gum has lost its flavor for two different flavors of gum. A sample of 20 people is used for mint, and another sample of 20 people is used for cinnamon gum.

Is there a meaningful difference in the amount of time for the different flavors? Explain your reasoning.

Info Gap: Comparing Populations

Data Card 1

- The distributions are not symmetric.

- Mean for mint: 74.5 minutes
- Median for mint: 65 minutes
- IQR for mint: 20 minutes
- MAD for mint: 20.9 minutes

- Mean for cinnamon: 108.75 minutes
- Median for cinnamon: 112.5 minutes
- IQR for cinnamon: 22.5 minutes
- MAD for cinnamon: 21.5 minutes

Info Gap: Comparing Populations

Problem Card 2

A grade 8 English teacher is interested in grammar scores for students coming from the two grade 7 English teachers.

Is there a meaningful difference in the means for student scores on a pretest coming from each grade 7 teacher based on the samples? Explain your reasoning.

Here are the scores from Teacher A

70	75	80	80	80	85	85	85	90	95

Info Gap: Comparing Populations

Data Card 2

The scores from Teacher B have:

- a symmetric distribution
- a mean of 79
- a median of 77.5
- a MAD of 7
- an IQR of 10

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