

Archery

This problem gives you the chance to:

- draw a box plot
- compare sets of data

Guy and Sagar both enjoy archery and hope to be picked for their college team.



There have been 15 matches in college this year. These are the scores for Guy.

1192	1258	1038	1208	956	1052	1262	994	1128	1066	1286	1174	1050	926	1240
------	------	------	------	-----	------	------	-----	------	------	------	------	------	-----	------

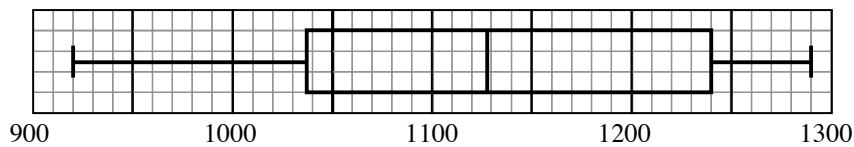
Guy's mean score is 1122.

These are the scores for Sagar.

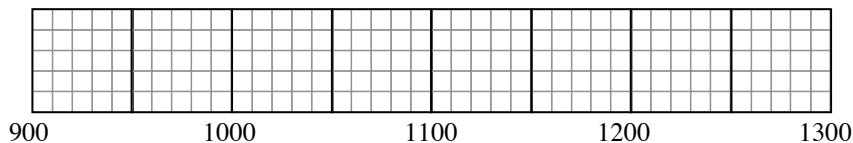
1134	1098	1182	1126	1066	1204	1052	1072	1156	1102	1088	1220	1168	1106	1164
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Sagar's mean score is 1129.

Here is a box plot for Guy's scores.



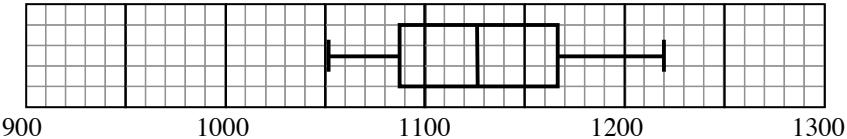
1. Draw a box plot for Sagar's scores.



2. Explain the main points on your box plot.

3. Who is the more consistent archer?
Explain how you know.

4. If you were picking the college team would you choose Guy or Sagar?
Explain why you would make this choice.

Archery	Rubric	
<p>The core elements of performance required by this task are:</p> <ul style="list-style-type: none"> draw a box plot compare sets of data <p>Based on these, credit for specific aspects of performance should be assigned as follows</p>	points	section points
<p>1. Draws a correct box plot:</p>  <p>Minimum and maximum correct. (1052, 1220)</p> <p>Lower quartile correct: (1088 or 1093) and upper quartile: (1168 or 1166)</p> <p>Median correct (1126)</p>	1 1 1	3
<p>2. Explains that:</p> <ul style="list-style-type: none"> the maximum and minimum points are Sagar's highest and lowest scores. the box corresponds to the quartiles with the median indicated 	1 1 1	3
<p>3. Gives correct answer: Sagar</p> <p>Gives a correct explanation such as:</p> <p>The range and interquartile range of Sagar's scores are much smaller than those of Guy.</p>	1 1	2
<p>4. Gives correct answer: Sagar and explains that Sagar is more consistent. Or has a higher mean.</p> <p>or</p> <p>Gives correct answer: Guy and explains that Guy sometimes gets very high scores which might win them the match.</p>	1 or 1	1
Total Points		9