

6 (i) Give one advantage and one disadvantage of using a box-and-whisker plot to represent a set of data. [2]

[illegible]

(ii) The times in minutes taken to run a marathon were recorded for a group of 13 marathon runners and were found to be as follows.

180 275 235 242 311 194 246 229 238 768 332 227 228

State which of the mean, mode or median is most suitable as a measure of central tendency for these times. Explain why the other measures are less suitable. [3]

This image shows a full page of white paper with horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(iii) Another group of 33 people ran the same marathon and their times in minutes were as follows.

190	203	215	246	249	253	255	254	258	260	261
263	267	269	274	276	280	288	283	287	294	300
307	318	327	331	336	345	351	353	360	368	375

(a) On the grid below, draw a box-and-whisker plot to illustrate the times for these 33 people. [4]

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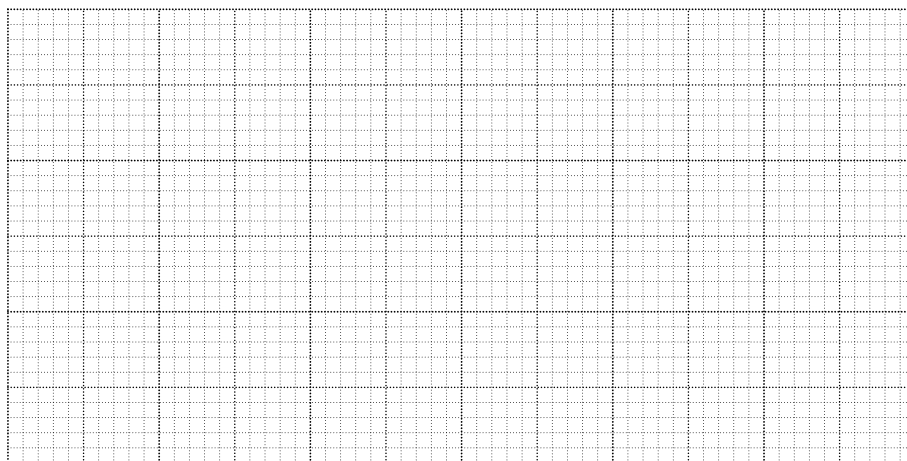
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(b) Find the interquartile range of these times. [1]

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