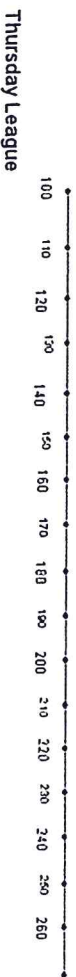


Make a Box-and-Whisker Plot for each set of data. Put the Monday League above the number line and the Thursday League below the number line.

Monday scores:
176, 212, 220, 110, 210, 206, 195, 220, 188, 180, 250, 214, 113, 218, 240

Thursday scores:
140, 145, 157, 160, 166, 168, 174, 186, 195, 206, 210, 217, 219, 220

Monday League



Use this set of data:

23, 39, 45, 46, 49, 50, 51, 51, 51, 68, 68, 71, 73, 82, 88, 89, 92, 95, 98, 99

6. 95 is at what percentile?

7. 51 is at what percentile?

8. What number is at the 20th percentile?

9. What number is at the 65th percentile?

Answer these questions using the Box-and-Whisker Plots you made.

1. If you bowled 210 in the Thursday league you are better than what % of the bowlers in your league?
2. If you bowled 160 in the Monday league you are better than what % of the bowlers in your league?
3. If you bowled 220 in the Thursday league you are the best bowler on Thursday night. What % Monday bowlers are better than you?
4. If you normally bowl 190 which league would you rather join? Explain.
5. If you normally bowl 140 which league would you rather join? Explain.

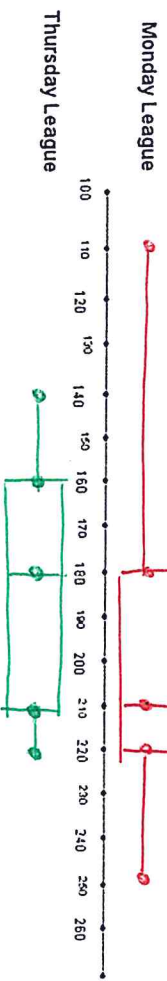
Make a Box-and-Whisker Plot for each set of data. Put the Monday League above the number line and the Thursday League below the number line.

Monday scores:

176, 212, 220, 110, 210, 206, 195, 220, 188, 180, 250, 214, 113, 218, 240

Thursday scores:

140, 145, 157, 160, 166, 168, 174, 186, 195, 206, 210, 217, 219, 220



Monday: min = 110 Q₁ = 180 MED = 210 Q₃ = 220 MAX = 250

Thursday: min = 140 Q₁ = 160 MED = 180 Q₃ = 210 MAX = 220

Use this set of data:

23, 39, 45, 46, 49, 50, 51, 51, 51, 68, 68, 71, 73, 82, 88, 89, 92, 95, 98, 99

20 #s

6. 95 is at what percentile?

$$17/20 = 85^{\text{th}} \text{ percentile}$$

7. 51 is at what percentile?

$$6/20 = 30^{\text{th}} \text{ percentile}$$

8. What number is at the 20th percentile?

$$(20^{\text{th}})(.20) = 4^{\text{th}} \text{ below} \rightarrow 49$$

9. What number is at the 65th percentile?

$$(20^{\text{th}})(.65) = 13^{\text{th}} \text{ below} \rightarrow 82$$

Answers

Answer these questions using the Box-and-Whisker Plots you made.

1. If you bowled 210 in the Thursday league you are better than what % of the bowlers in your league? 75%
2. If you bowled 160 in the Monday league you are better than what % of the bowlers in your league? $\sim 25\%$ or 0% to 25%
3. If you bowled 220 in the Thursday league you are the best bowler on Thursday night. What % Monday bowlers are better than you? 25%
4. If you normally bowl 190 which league would you rather join? Explain.
5. If you normally bowl 140 which league would you rather join? Explain.