Measures of Spread P-Set

The following are stock prices for Amazon during the last two weeks of July 2022. Round your answers to 2 decimal places.

113.76	118.21	122.77	124.63	122.42
121.14	114.81	120.97	122.28	134.95

1. What is the mean of the stock prices?

2. What is the range of stock prices?

3. What is the population standard deviation?

4. What is the population variance?

5. What is the sample standard deviation?

6. What is the sample variance?

7. Using your answers from questions 1 and 5, find the minimum and maximum "usual" stock price values.

8. Are there any stock prices that would be considered "unusual"? If so, which one(s)?

9. What is a good consequence of owning a stock with a high standard deviation?

10. What is a bad consequence of owning a stock with a high standard deviation?

The heights of a group of professional basketball players is given. Round your answers to 1 decimal place.

Height	Frequency
70 – 71	3
72 – 73	7
74 – 75	16
76 – 77	12
78 – 79	10
80 – 81	4
82 – 83	1

11. Estimate the mean height of this group of basketball players.

12. Estimate the sample standard deviation of this group of basketball players.

13. What are the minimum and maximum "usual" heights of these basketball players?

14. Would any listed player's height in this group be considered "unusual"?

Key

1. 121.59

2. 21.19

3. 5.56

4. 30.96

5. 5.86

6. 34.40

7. Minimum = 109.87; Maximum = 133.31

8. 134.95

9. Answers vary

10. Answers vary

11. 75.8

12. 2.8

13. Minimum = 70.2; Maximum = 81.4

14. The player in the 82 − 83 height class