Z-score questions:

Student A and Student B are in different classes, and they finished their final exam.

1) Student A’s Z-score is higher than Student B’s Z-score. They got the same mark on the exam, and it was higher than the average. The two classes have the same average. What can we say about the two standard deviations?

2) Student A’s Z-score is lower than Student B’s Z-score. They got the same mark, and it was lower than the average. The two classes have the same standard deviation. What can we say about the two class averages?

3) Student A’s Z-score is higher than Student B’s Z-score. The two classes had the same average and the same standard deviation. Which student got the higher mark if both of their Z-scores are positive numbers?

4) Student A’s Z-score is lower than Student B’s Z-score. They got the same mark, and it was higher than the average. The two classes have the same average. What class has the lower standard deviation?

ANS

1) The standard deviation of class b is higher than class a

2) Class A has the higher average

3) Student A

4) Class B