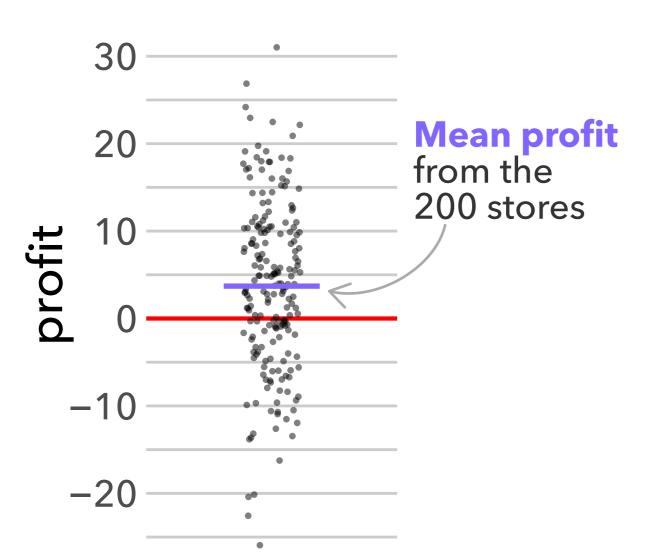
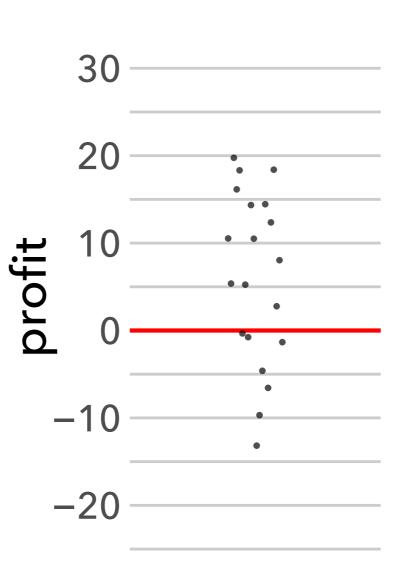
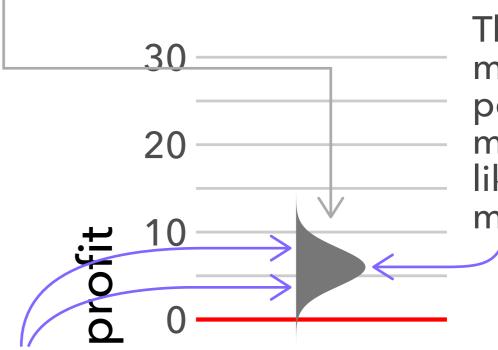
You are a manager supervising the sales of stores. In each region there are 200 stores. The graph below shows what the profit for each store looks like. Your task will be to guess whether the average profit of the stores in a region is greater than zero

However, you only receive the sales data for 20 stores, and you have to make the decision based on this limited information.





To help you with the decision, your business analyst used statistics and created a plot which shows an estimate of the mean profit. Since there are only 20 data points, this estimate of the mean will be uncertain. The analyst used a *probability density* plot to visualise this uncertainty. The width of the density shows you which values of the mean are more likely.



The width is less at these points. This means that the while it is less likely that the mean profit is 4 or 8, these values are still plausble.

The width is maximum at this point. This means the most likely value of mean profit is ~6