

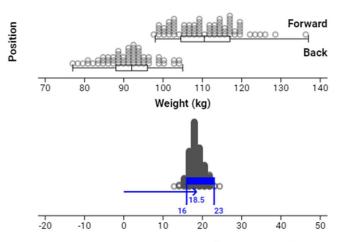
## Part 8: Writing a Conclusion

We also need to make a conclusion that summarises what we have found so far. We need to say what the call is that we are making and why we can make the call (or if we can't make the call). We can only make the call if the entire interval is positive or the entire interval is negative, as if zero is in the interval then there might be a difference of zero or the difference might be the other way round. You also need to discuss the sampling variability. For Merit and Excellence it would be good to talk about what you think the population looks like (and why) and how this will affect the sample.

Make a conclusion for each of the sets of data, the first one has been done for you. You will need to use some extra paper for the last few.

- 1. Based on looking at my sample I am reasonably confident that back in the population of all rugby players in New Zealand and South Africa that forwards median weight will be more than backs median weight. I can make this call as the confidence interval says that forwards median weight is likely to be between 16.0 kg and 23.0 kg more than backs median weight. I can make the call as the entire confidence interval is positive.
  Lam basing this conclusion on the bootstrap confidence interval that I calculated. This involves
  - I am basing this conclusion on the bootstrap confidence interval that I calculated. This involves re-sampling from my original sample of 145 rugby players. I am assuming my original sample was representative of the population of all rugby players. If I were to take another sample, the results may have differed as that sample will contain a different makeup of rugby players.

## 1. Rugby Players Weight by Position



Made with NZ Difference Between Medians (Forward - Back).mathsnz.com