

## **Dot Plots**

#### The Baton Relay Race

The Red Tigers and the Blue Leopards are competing in a baton relay race for the 2018 Championship Cup. In this race, athletes compete as a team. The first runner of each team will complete the first leg of the race. They will then pass a baton to the next runner in their team and so on until each leg is complete and the race has finished.

In the dot plot below,

- Name the graph and the axes
- Note: Red dots represent Red Tiger runners and blue dots represent Blue Leopard runners. Time for race completion is shown in seconds. Each leg of the race is 125 metres.



# Questions 1. If each runner only completes one leg of the race, what is the distance of the entire race track?





2. Which team won the race?
3. What fraction of all runners are carrying a baton at any moment?
4. What percentage of the runners completed their leg in under 9 seconds?
5. Find the average leg time for both teams.
6. What percentage of the Red Tiger runners completed their leg between 8 and 10 seconds?
7. How many runners in the runner-up team have to improve their individual leg time by 0.5 seconds for their team to win?
8. Compared to the race time of the runner-up team, how much faster is the leading team? Use a calculator to help you solve the problem and give your answer as a percentage.



## **Dot Plots**

### **Ralph's Supermarket Goods**

Every Monday, Ralph's Supermarket receives goods from several delivery trucks at different times of the day.

In the dot plot below,

- Name the graph and the axes
- Note: Green dots represent fresh food deliveries (FFDs) and purple dots represent canned food deliveries (CFDs). Time of delivery is shown as hours after 6:00am (store opening time).





## M6DRI2.2

### Questions

1. Count how many FFDs and CFDs arrived this week.

2. How many fresh food deliveries arrived before 9am?

3. How many canned food deliveries arrived at or after noon time?

4. What fraction of all deliveries were received between 8am and 11am?

5. If each fresh food delivery comes in six boxes, how many boxes containing fresh food arrived before 9am?

6. If each canned food delivery comes in twelve boxes, how many boxes containing canned food arrived before 2pm?

7. What percentage of all deliveries came at least five hours after the supermarket opened? Use long division to find the answer and round to two decimals.