Dot Plots

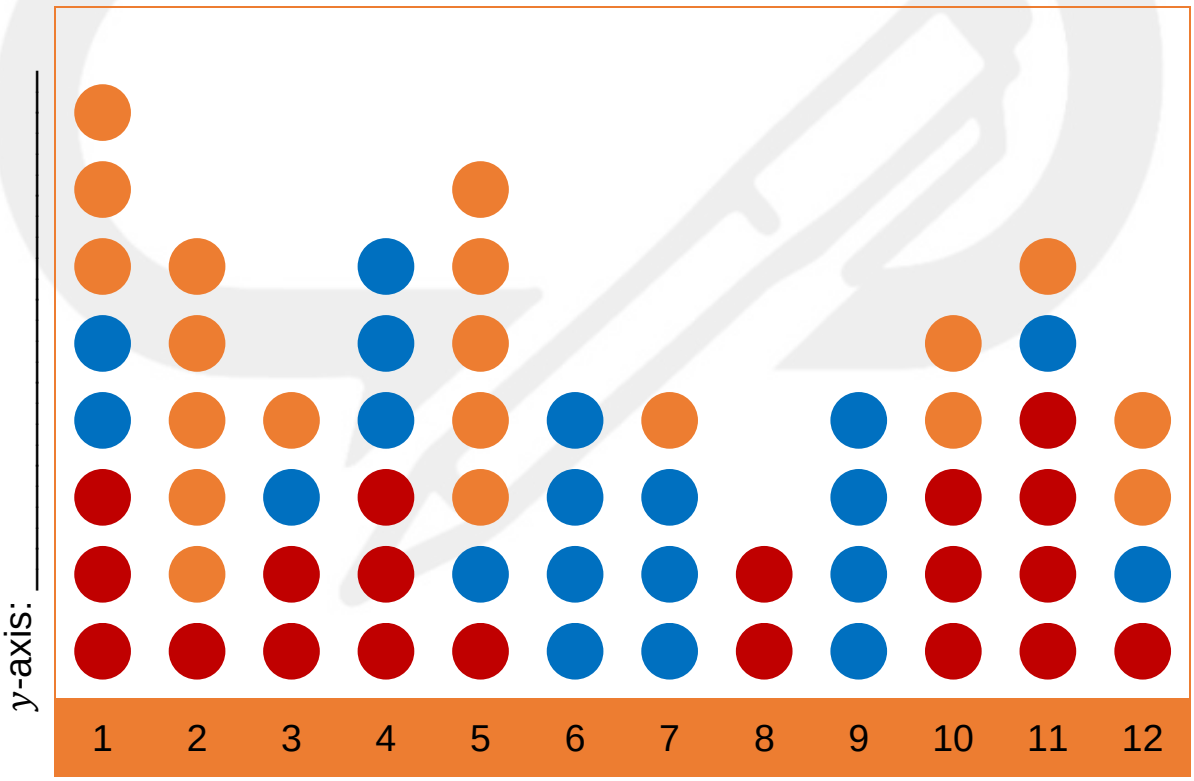
The Chocolate Fundraiser

St. Eunice Primary School is holding a chocolate drive over twelve days. Student volunteers are given fundraising boxes and asked to sell as many chocolate bars as they can door-to-door in their neighbourhood. All funds raised will be donated to charity.

In the dot plot below,

- Name the graph and the axes
- *Note: All dots represent a sold chocolate bar (small or large). Red dots represent Lucy, blue dots represent Ryan and orange dots represent Joanna.*

Title: _____



x-axis: _____

Questions

1. What is the range and mode of the data plot?

2. How many chocolate bars did Lucy, Ryan and Joanna sell?

3. How many chocolate bars did Joanna sell in the first quarter of the chocolate drive?

4. Find the average number of sales per day across the twelve days.

5. George's chocolate sales are not shown on the dot plot. However, the number of bars George sold can be found using the equation:

$$C = x^2 - 9x$$

(where $C =$ number of sold bars, $x =$ number of fundraising days)

(a) Find the number of chocolate bars George sold.

(b) If the drive continued for an extra three days, how many bars would George have sold?

6. For this fundraiser, small chocolate bars sell for $2.80 and large chocolate bars sell for $4.20. If Lucy only sold large bars, Ryan only sold small bars and Joanna's sold bars were half of each, how much money did they raise in the first five days of the drive?

7. If three quarters of George's sales were for small chocolate bars, how much money did he raise altogether during the twelve days?