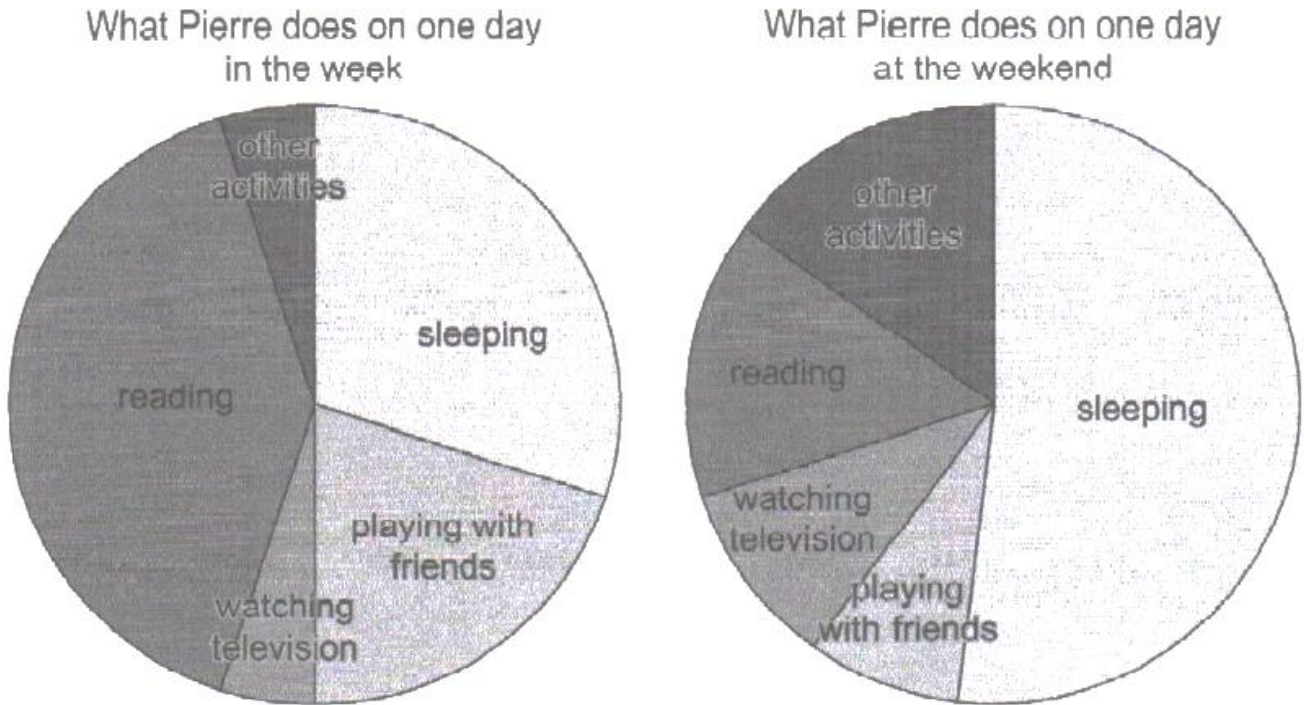


Statistical Methods – 2024 Checkpoint Primary Math**1. 2024/Paper 1_stage 6/No.13**

Pierre wants to compare the amount of time he spends on some activities during the week and at the weekend.

He collects data for one day in the week and one day at the weekend.

Here are his results.



- (a) Write a sentence to compare the **amount of time** Pierre spends watching television on the two days.

Pierre spends more time watching television at the weekend than on a weekday. [1]

- (b) Write a number in the box to make the sentence correct.

At the weekend, Pierre spends about 50 % of his day sleeping.

[1]

2. 2024/Paper 1_stage 6/No.24

Chen takes part in a reading competition at his school.
 He records the number of pages of a book he reads each day.
 He groups the data using **equal** intervals.
 He draws a bar chart to show his data.



(a) Complete the labels on the x-axis of the bar chart.

[1]

(b) Complete the sentence with the correct number.

Chen records the number of pages of a book he reads for 30 days. [1]

0 - 19 : Number of days = 2

20 - 39 : Number of days = 5

40 - 59 : Number of days = 8

60 - 79 : Number of days = 7

80 - 99 : Number of days = 5

100 - 119 : Number of days = 3

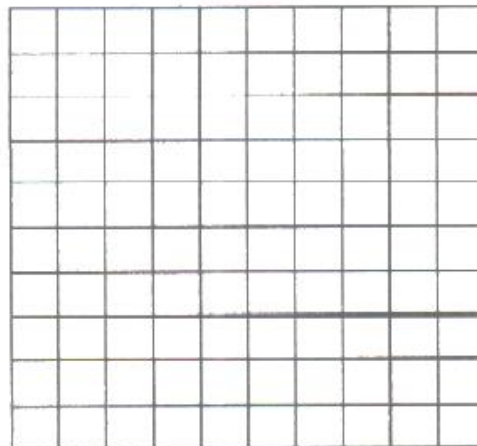
Total number of days = $2 + 5 + 8 + 7 + 5 + 3$
 = 30

3. 2024/Paper 1_stage 6/No.26

Safia asks 10 people in her class how they travel to school on Monday. Here are her results.

How people travel to school	Frequency
Taxi	1
Bus	3
Walk	2
Bicycle	4

- (a) Safia wants to show the information in a waffle diagram. Here is her empty waffle diagram.



Write the number of squares Safia must shade to show how many people travel to school by bicycle on Monday.

$$\text{Percentage} = \frac{4}{10} \times 100\% = 40\%$$

..... 40 [1]

(b) Safia looks at her results and writes two conclusions.

Tick (✓) to show if each of Safia's conclusions are definitely true, maybe true or definitely false.

Conclusion	Definitely true	Maybe true	Definitely false
We do not need any parking places at our school because no-one comes to school by car.		✓	
$\frac{4}{10}$ of the people I asked travel to school by bicycle on Monday.	✓		

[1]

4. 2024/Paper 2_stage 6/No.2

A shopkeeper thinks the number of ice creams she sells changes with the temperature each day.

She records the number of ice creams she sells and the temperature each day for one month.

Draw a ring around the most appropriate chart she could use to show her data.

Venn diagram

waffle diagram

scatter graph

pie chart

[1]

5. 2024/Paper 2_stage 6/No.8

Eva wants to find out if older children spend more time doing sport than younger children.

She writes this questionnaire.

What is your name?

How many hours do you spend doing sport each week?

Tick (✓) **one** other question that Eva **must** ask.

What is your favourite sport?	
What is your age?	✓
How many brothers and sisters do you have?	
What time of day do you do sport?	

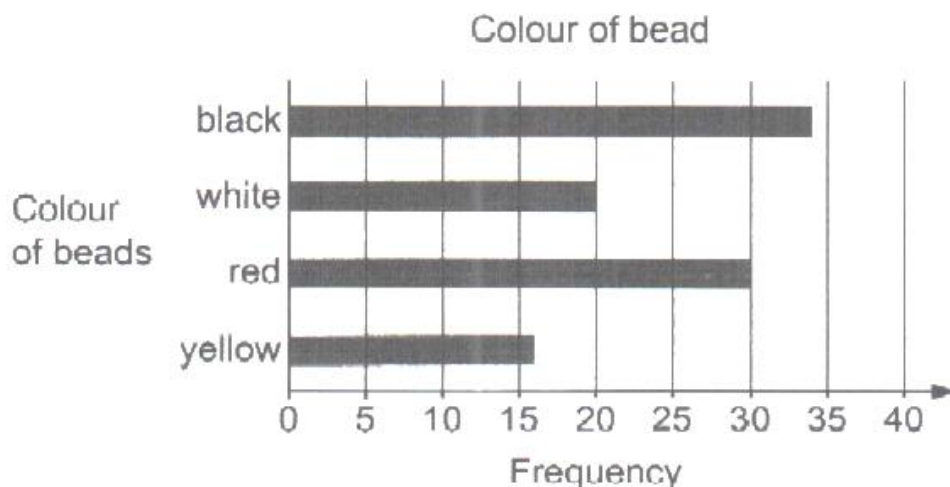
[1]

6. 2024/Paper 2_stage 6/No.17

Rajiv has a bag containing 10 beads.

He picks one bead at random and records the colour.
He returns the bead to the bag.

He does this 100 times.
Here are his results.



Here is a table showing the colours of the beads in four bags.

	Bag A	Bag B	Bag C	Bag D
Black	● ● ●	● ● ●	● ● ●	● ●
White	● ●	● ●	● ● ●	● ● ●
Red	● ● ●	● ●	● ●	● ●
Yellow	● ●	● ● ●	● ●	● ● ●

Write the letter of the bag that is **most likely** to be Rajiv's bag of beads.

The number with the highest number of black and red beads.

A

[1]

7. 2024/Paper 2_stage 6/No.18

Youssef wants to know the distance each of his teachers travel to school.
Here is the data he collects.

Distance travelled in kilometres
8
35
15
50
10
2

(a) Calculate the range of his data.

$$\begin{aligned}\text{Range} &= \text{highest distance} - \text{lowest distance} \\ &= 50 - 2 \\ &= 48 \text{ km}\end{aligned}$$

.....48 kilometres [1]

(b) Calculate the mean of his data.

$$\text{Mean} = \frac{8 + 35 + 15 + 50 + 10 + 2}{6}$$

$$\begin{array}{r} + 8 \\ 35 \\ \hline 43 \\ + 15 \\ \hline 58 \\ + 50 \\ \hline 108 \\ 10 \\ \hline 118 \\ + 2 \\ \hline 120 \end{array}$$

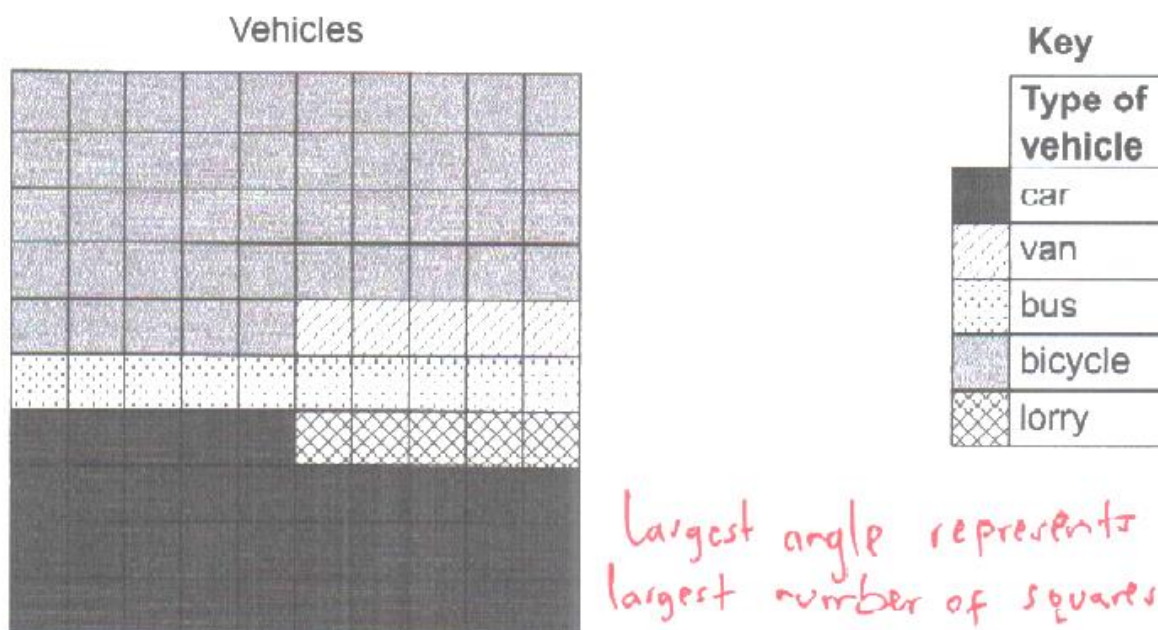
$$= \frac{120}{6}$$

$$= 20 \text{ km}$$

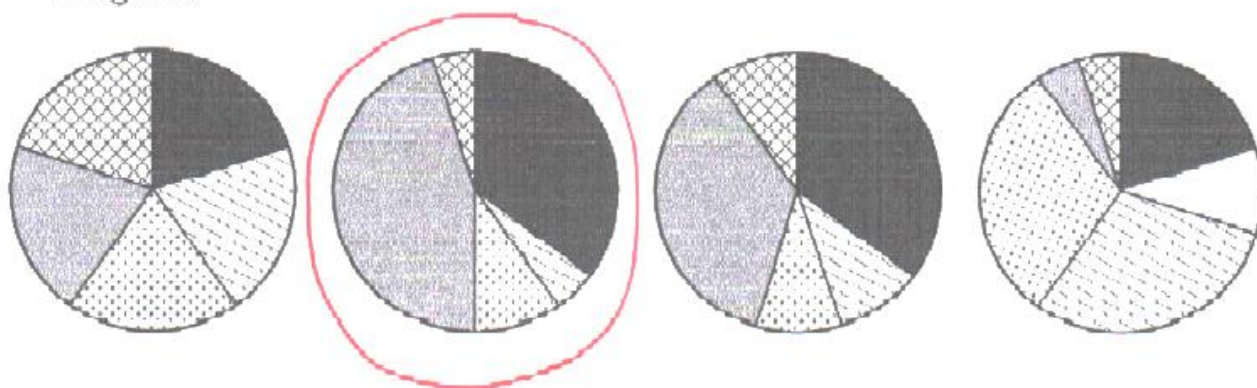
.....20 kilometres [1]

8. 2024/Paper 2_stage 6/No.29

Ahmed counts the types of vehicles that pass his school on one day. He records the data on a waffle diagram.



- (a) Draw a ring around the pie chart that shows the same information as the waffle diagram.



[1]

- (b) Ahmed says,

'If we count for half an hour, instead of one day, the waffle diagram will be the same.'

Explain why Ahmed could be wrong.

The proportion of each type of vehicle might not be the same at all times of the day. [1]