

Data Analysis

- 1 Find the mean of these numbers

12, 7, 6, 11

A 6	B 4	C 8
D 13	E 9	F 12

- 2 What is the median of this data set?

36, 44, 44, 57, 90, 39, 37, 64, 30, 51

A 57	B 44
C 47	D 37

- 3 Find the mode of the numbers (6, 6, 6, 12, 13, 14) using the guide

6 6 6 12 13 14

three 6s

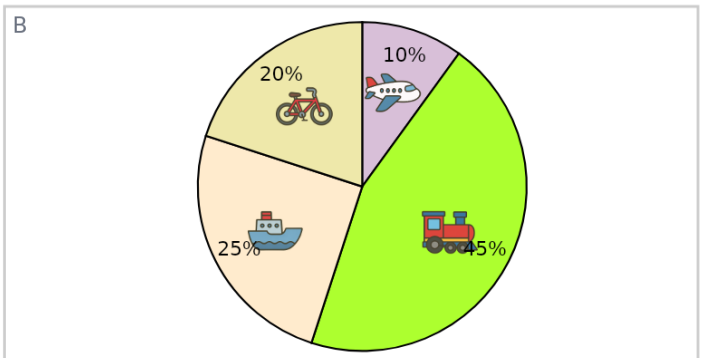
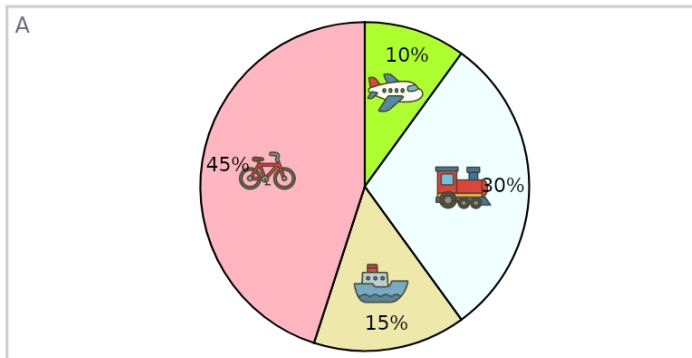
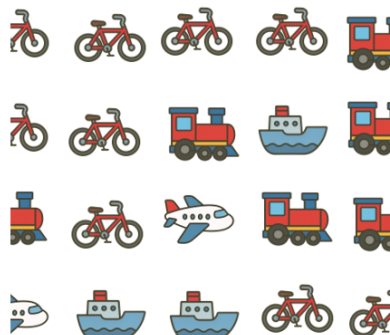
A 9	B 0	C 6
D 4	E 10	F 1

- 4 Find the range of these numbers

4, 5, 8, 5

A 4	B 6	C 2
D 5	E 3	F 9

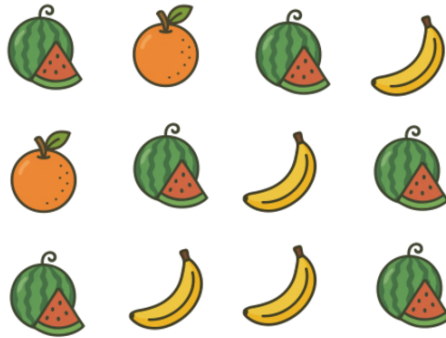
- 5 Create a circle graph with this data. Each picture represents a kid's way to travel.



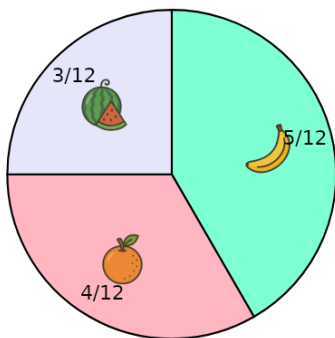


Data Analysis

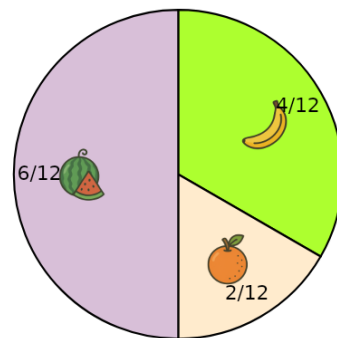
6 Create a circle graph with this data. Each picture represents a kid's favourite fruit.



A



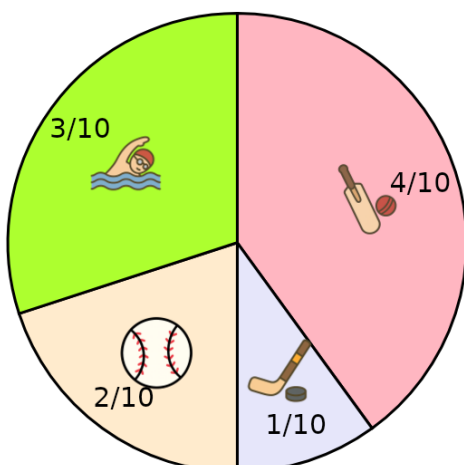
B



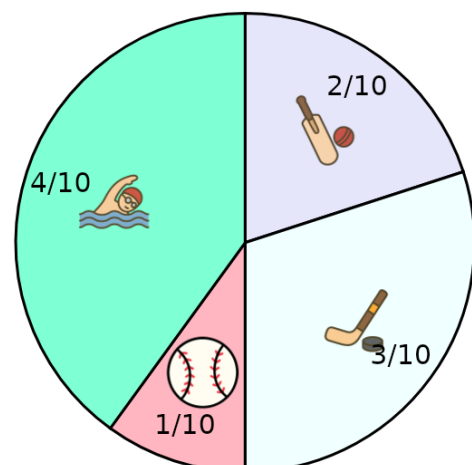
7 Create a circle graph with this data

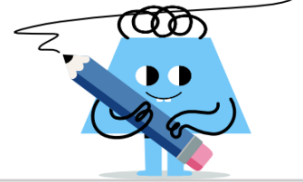
4 kids like cricket, 1 like hockey, 2 like baseball, 3 like swimming.

A



B

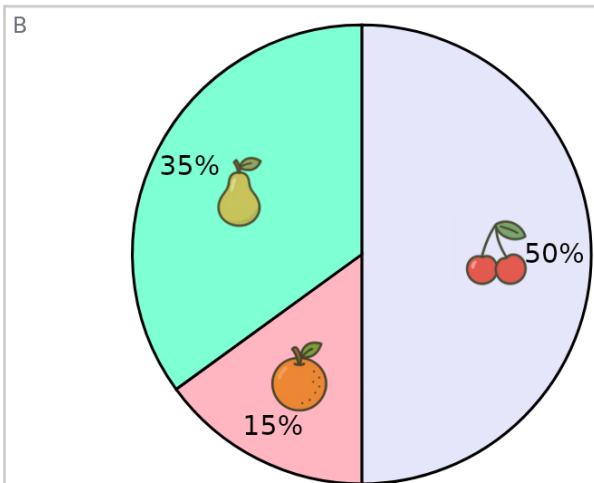
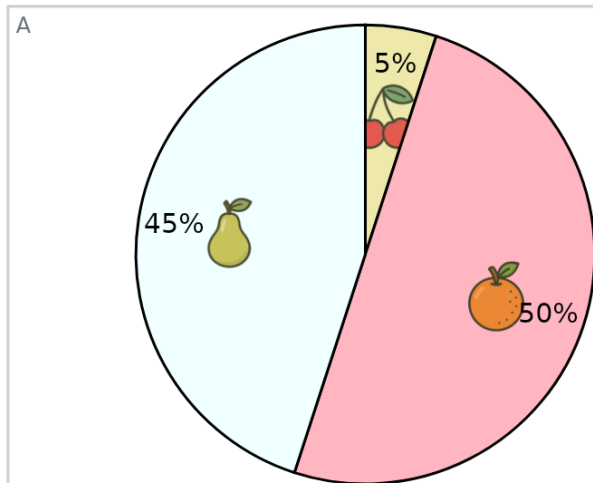




Data Analysis

8 Create a circle graph with this data

1 kids like cherry, 10 like orange, 9 like pear.



9 Is this variable qualitative or quantitative?
Province in which a Canadian resident lives

A Quantitative

B Qualitative

10 Which of these variables is quantitative?

Quantitative

A Blood type of a patient

B Brand of smartphone owned

C Weight of a checked suitcase

11 How is this variable best classified?
Number of defective light bulbs in a shipment

A Quantitative (continuous)

B Quantitative (discrete)

C Qualitative

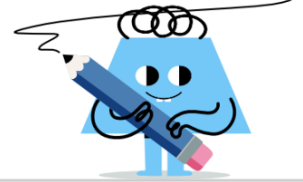
12 Which of these variables is best classified as quantitative (discrete)?

Quantitative (discrete)

A Mode of transportation used to travel to work

B Distance travelled during a road trip

C Number of correct answers on a quiz



Data Analysis

13 What is the best way to collect this data?

Goal: Percentage of students who walk to school

- A Survey students on a day with unusually poor weather.
- B Survey a representative sample of students about their usual travel method.
- C Ask teachers how most students travel to school.
- D Count students entering through the front entrance over several mornings and assume they represent the entire student body.

14 Why is this survey question problematic?

Survey question: What is your annual household income?

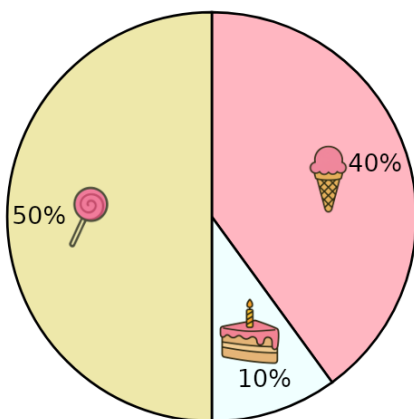
- A Respondents may choose not to answer honestly because the topic is personal.
- B Respondents may choose not to answer precisely because they do not remember the exact amount.

15 What is the main problem with this survey question?

Survey question: How satisfied are you with your teachers and the amount of homework you receive?

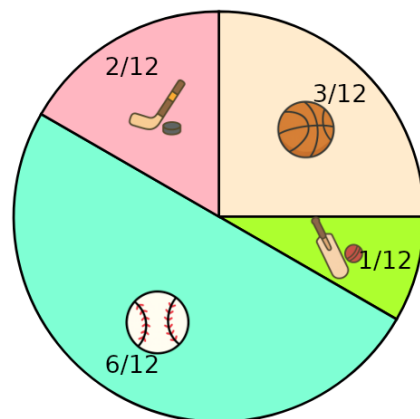
- A Recall bias
- B Missing response options
- C Sensitive question
- D Double-barrelled question

17 150 kids were surveyed. How many kids like lollipop as a treat?



- | | | |
|------|------|-------|
| A 60 | B 75 | C 135 |
| D 45 | E 15 | |

16 180 kids were surveyed. How many kids like cricket as a sport?

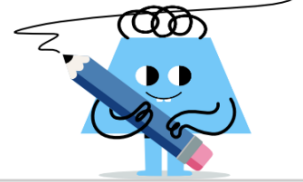


- | | | |
|------|------|------|
| A 15 | B 90 | C 45 |
| D 30 | E 60 | |

18 Would the mean or the median be a better measure of center for this data set?

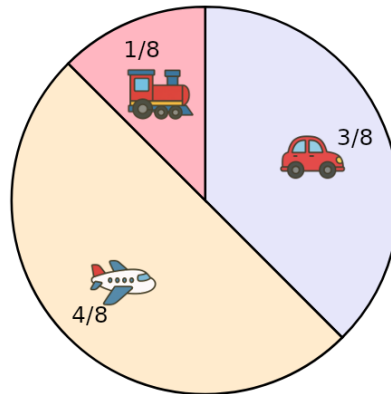
Data set: 31, 24, 96, 30, 28, 30

- | | |
|--------|----------|
| A Mean | B Median |
|--------|----------|



Data Analysis

19 240 kids were surveyed. What transportation type do 90 children like?



A



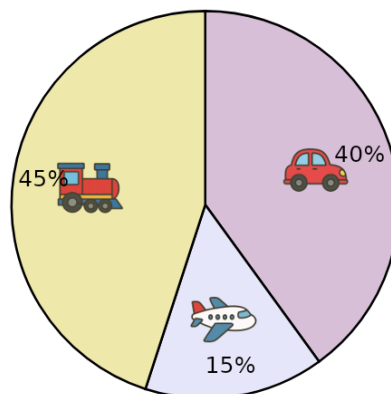
B



C



20 600 kids were surveyed. What transportation type do 240 children like?



A

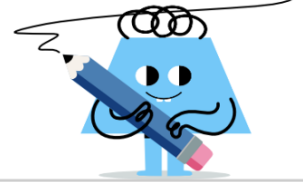


B



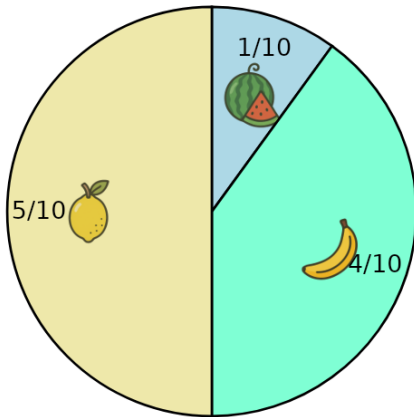
C





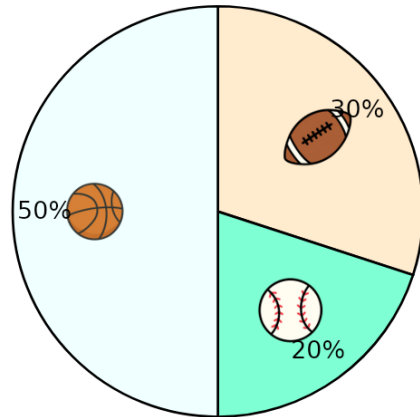
Data Analysis

21 200 kids were surveyed. How many more kids like banana than watermelon as a fruit?



- | | | |
|---------|----------|----------|
| A
60 | B
80 | C
100 |
| D
20 | E
120 | |

22 300 kids were surveyed. How many kids like either basketball or baseball as a sport?



- | | | |
|---------|----------|----------|
| A
30 | B
90 | C
150 |
| D
60 | E
210 | |

23 Choose the data set that fits.

Which data set would have the mean as the best measure of center?

A
53, 52, 56, 53, 51, 50, 50

B
34, 37, 36, 33, 35, 5, 36, 32