

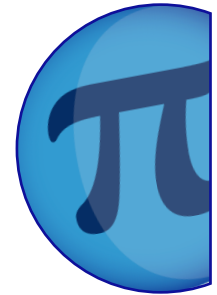


Can You Trust Your IQ?

NAME:

CLASS:

DATE:



Basic

1) Select which of the following items could be described as qualitative data and which quantitative data.

- a) age b) birthplace c) height
d) favourite TV soap e) fastest car f) exam marks

2) Using the table below, collect information on the months in which members of the group were born.

Month	Tally	Number
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		



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Basic

2) a) Present this information as a bar chart.

b) Theoretically there should be an equal spread of birth months. Does your information/ graph reflect this?

3) You are asked to find out which flavour of crisps is the most popular in your school. To do this use your group as a sample for the whole school and conduct the following survey. Choose your favourite flavour of crisps from the following list:

Flavour	Tally	Number
Salt and vinegar		
Cheese and onion		
Ready salted		
Tomato		
Beef		
Prawn cocktail		

a) Present this information as a pictogram.

b) There are at least two possible reasons that this survey may be considered biased. What are these?

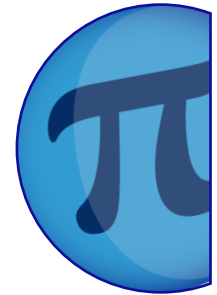


Can You Trust Your IQ?

NAME:

CLASS:

DATE:



Core

1) Select which of the following items could be described as qualitative data and which quantitative data.

- a) age b) birthplace c) height
d) favourite TV soap e) fastest car f) exam marks

2) You are asked to find out which flavour of crisps is the most popular in your school. To do this use your group as a sample for the whole school and conduct the following survey. Choose your favourite flavour of crisps from the following list:

Flavour	Tally	Number
Salt and vinegar		
Cheese and onion		
Ready salted		
Tomato		
Beef		
Prawn cocktail		

a) Present this information as a pictogram.

b) There are at least two possible reasons that this survey may be considered biased. What are these?



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Core

3) 30 students were asked to record the length of time (in minutes) they spent on maths homework last night. The data is as follows:

38, 12, 22, 20, 25, 43, 5, 36, 36, 22, 20, 35, 0, 35, 27, 33, 37, 26, 33, 25, 17, 44, 20, 35, 10, 8, 16, 5, 32, 17.

a) Complete the following frequency table:

Time spent on homework	Number of students
0-4	
5-9	
10-14	
15-19	
20-24	
25-29	
30-34	
35-39	
40-44	
45-49	

b) Present the data in a bar chart.

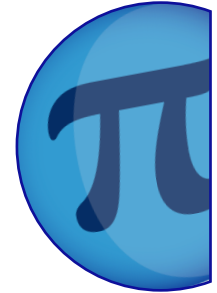


Can You Trust Your IQ?

NAME:

CLASS:

DATE:



Advanced

1) 30 students were asked to record the length of time (in minutes) they spent on maths homework last night. The data is as follows:

38, 12, 22, 20, 25, 43, 5, 36, 36, 22, 20, 35, 0, 35, 27, 33, 37, 26, 33, 25, 17, 44, 20, 35, 10, 8, 16, 5, 32, 17.

a) Complete the following frequency table:

Time spent on homework	Number of students
0-4	
5-9	
10-14	
15-19	
20-24	
25-29	
30-34	
35-39	
40-44	
45-49	

b) Present the data in a bar chart.



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Advanced

2) 20 students were asked to record the length of time (in minutes) they spent on their science homework last night. The data is as follows:

12, 5, 9, 20, 18, 15, 7, 16, 7, 5, 25, 26, 0, 15, 17, 13, 10, 0, 11, 19.

a) Complete the following frequency table:

Time spent on homework	Number of students
0-4	
5-9	
10-14	
15-19	
20-24	
25-29	

b) Present the data in a bar chart.

3) Discuss any differences in both sets of results. Give possible reasons for differences on time spent on homework.



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ANSWERS

Basic

- 1) a) quantitative b) qualitative c) quantitative
d) qualitative e) qualitative f) quantitative

3) b) Is your class truly representative of your school?
What if your favourite flavour of crisp is not represented?

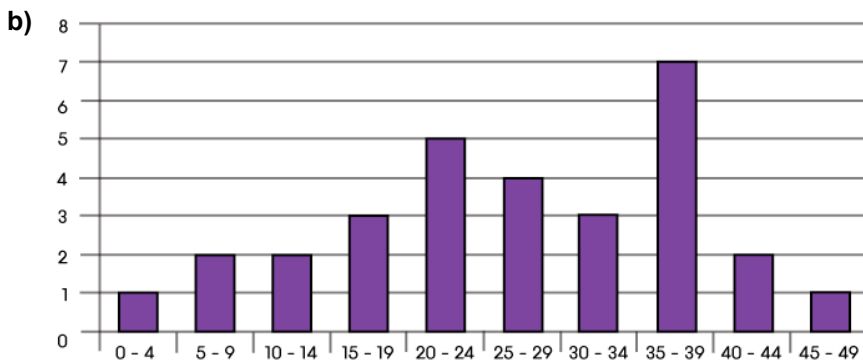
Core

- 1) a) quantitative b) qualitative c) quantitative
d) qualitative e) qualitative f) quantitative

2) b) Are your class truly a good representative of your school?
What if your favourite flavour of crisp is not represented?

3) a)

Time spent on homework	Number of students
0-4	1
5-9	2
10-14	2
15-19	3
20-24	5
25-29	4
30-34	3
35-39	7
40-44	2
45-49	1





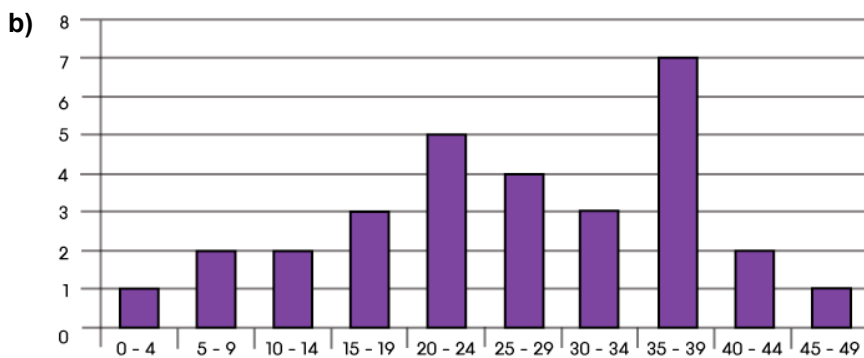
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ANSWERS

Advanced

1) a)

Time spent on homework	Number of students
0-4	1
5-9	2
10-14	2
15-19	3
20-24	5
25-29	4
30-34	3
35-39	7
40-44	2
45-49	1



2) a)

Time spent on homework	Number of students
0-4	2
5-9	5
10-14	4
15-19	6
20-24	1
25-29	2



Can You Trust Your IQ?

ANSWERS

Advanced

