

UNIT 5 *Data Analysis*

Overhead Slides

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- 5.1 Angles in a Pie Chart
- 5.2 Drawing a Pie Chart
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OS 5.1

Angles in a Pie Chart

The scores obtained by 20 pupils in a Maths test are listed opposite:

6	7	4	3	2
9	10	5	6	7
3	1	5	6	5
4	3	1	9	8

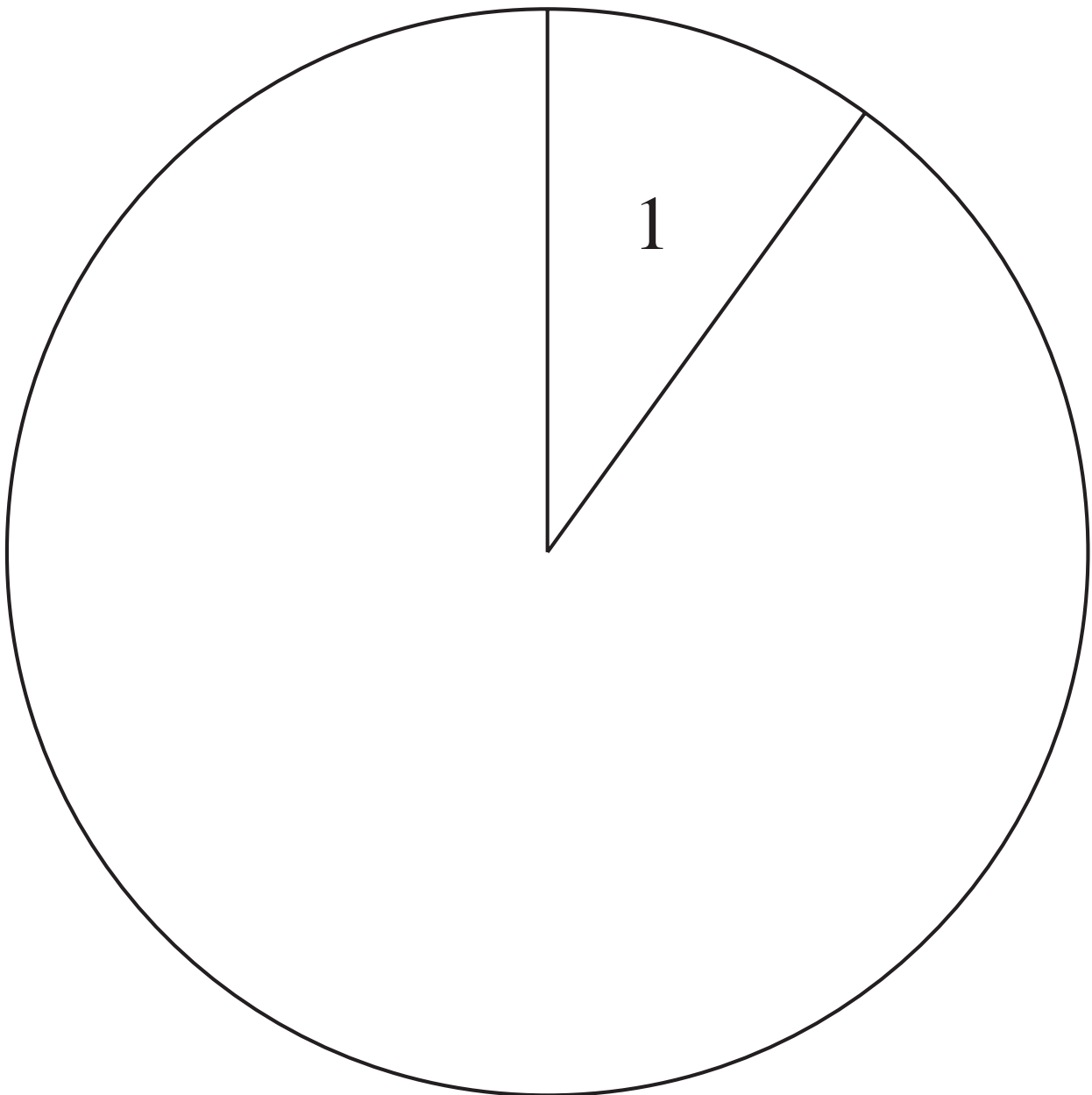
Use the data to complete the following table:

<i>Score</i>	<i>Tally</i>	<i>Frequency</i>	<i>Angle</i>
1			$\frac{\quad}{20} \times 360^\circ = \quad^\circ$
2			$\frac{\quad}{20} \times 360^\circ = \quad^\circ$
3			
4			
5			
6			
7			
8			
9			
10			

OS 5.2*Drawing a Pie Chart*

Use the data in the table to complete the pie chart:

<i>Score</i>	1	2	3	4	5	6	7	8	9	10
<i>Angle</i>	36°	18°	54°	36°	54°	54°	36°	18°	36°	18°



OS 5.3

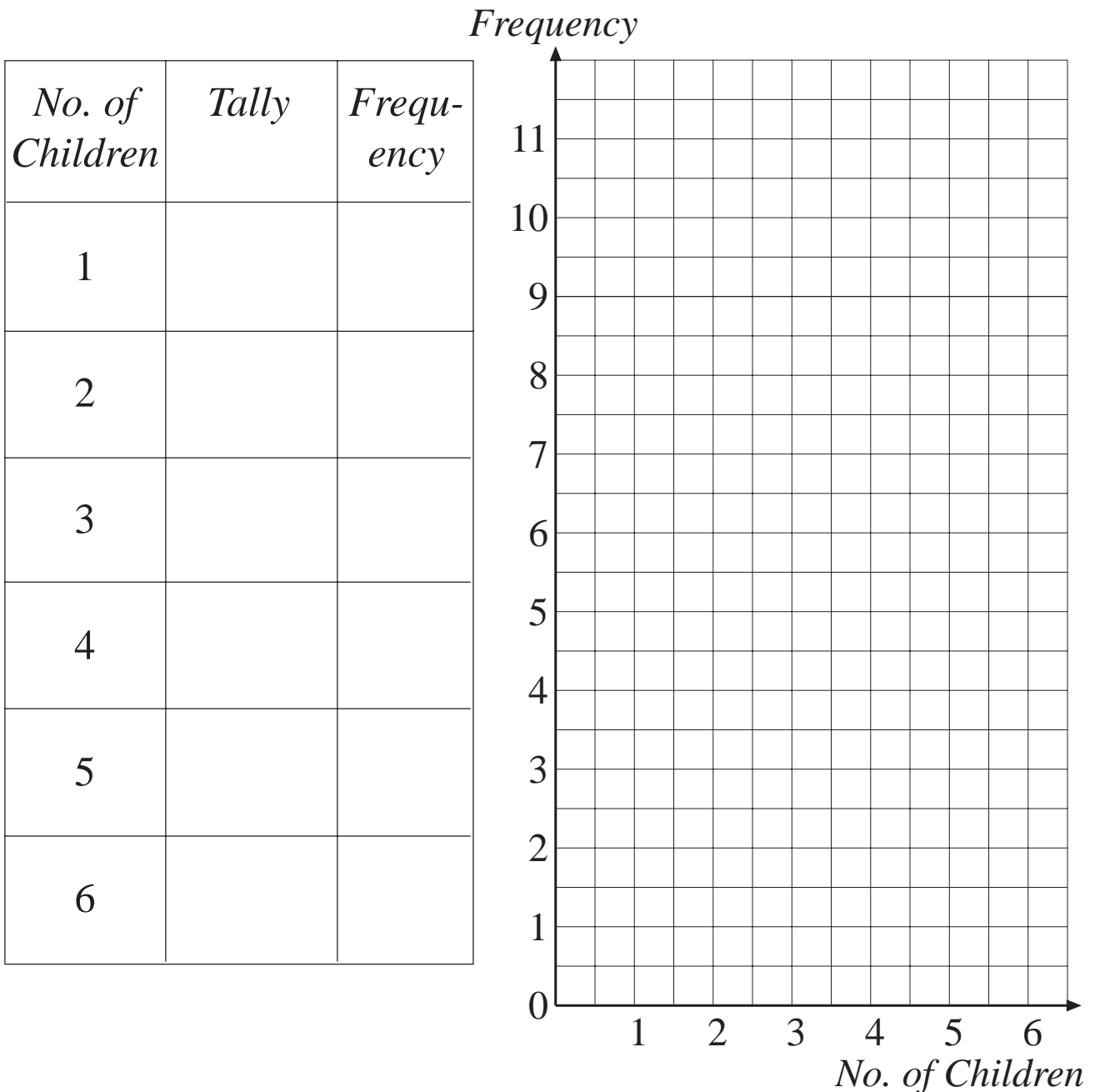
Vertical Line Graph

A class collected data on the number of children in their families.

The results are listed opposite:

1	2	3	1	2	2	3	4
4	3	2	1	1	1	2	2
3	2	1	1	1	4	5	2
6	1	2	2	3	3	3	2

Complete the table and vertical line graph below.



OS 5.4

Mean and Range

1. Calculate the *mean* and *range* of 11, 7, 14, and 12.

$$\text{Mean} = \frac{\quad}{4}$$

=

$$\text{Range} = \quad$$

=

2. Complete this table to find the *mean* and *range*.

<i>Score</i>	<i>Frequency</i>	<i>Score</i> \times <i>Frequency</i>
0	2	$0 \times 2 = 0$
1	7	
2	8	
3	3	
4	2	
5	4	

$$\text{Mean} = \quad$$

=

$$\text{Range} = \quad$$

=

OS 5.5

The Mode

1. Calculate the *mode* of this set of data:

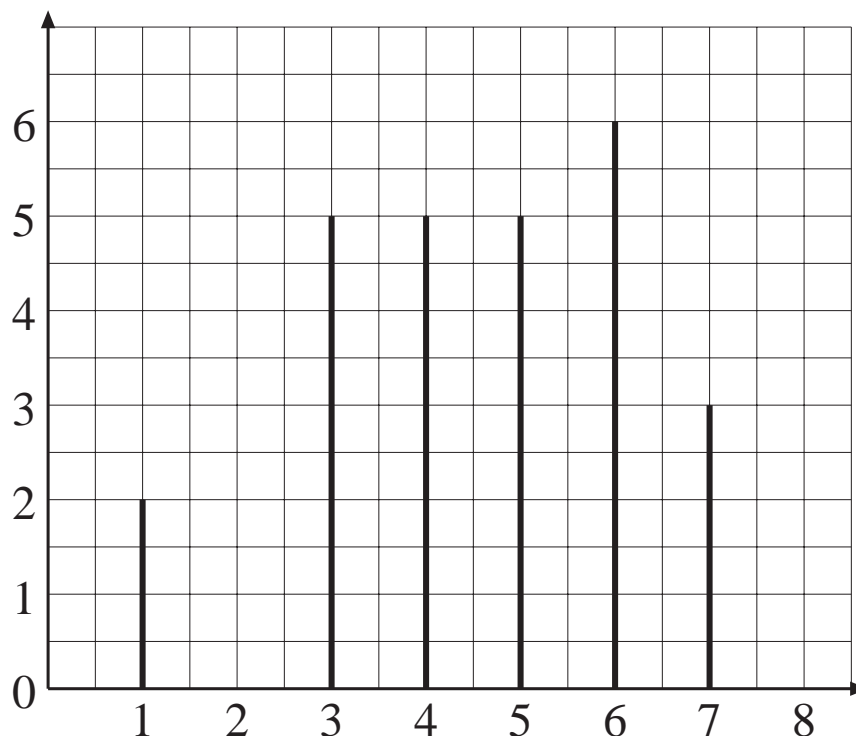
3 7 4 3 7 2 1 6

2. Calculate the *mode* of the data in this table:

<i>Score</i>	<i>Frequency</i>
0	2
1	7
2	8
3	3
4	2
5	4

3. Calculate the *mode* of the data displayed in the following line graph:

Frequency



OS 5.6*The Median*

1. Calculate the *median* of this set of data:

1 3 7 4 2 6 9

2. Calculate the *median* of this set of data:

3 7 2 16 8 2 4

3. Calculate the *median* of the data in the following table:

<i>Score</i>	<i>Frequency</i>
0	2
1	7
2	8
3	3
4	2
5	4

OS 5.7*Mode, Median and Mean*

In one hour the following sizes of men's shoes are sold in a shoe shop:

8 6 8 7 7 9 8 9 9 13
9 11 9 8 12 9 6 7 7 8

(A) What is the *mode* ?

(B) What is the *median* ?

(C) What is the *mean* ?

Which of these three averages
best represents the data?
