UNIT 5 *Data Analysis* Overhead Slides

Overhead Slides

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

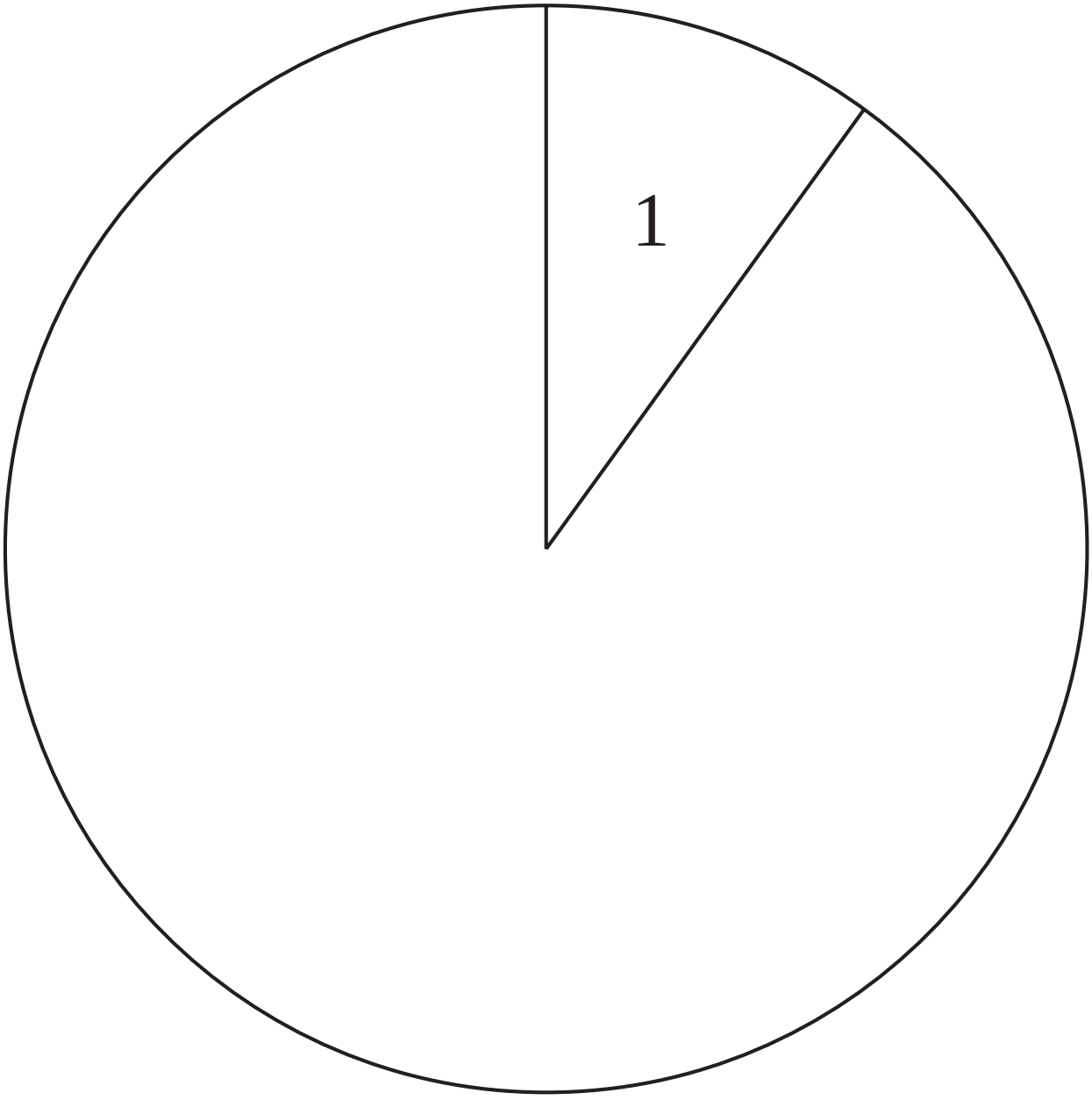
Use the data to complete the following table:

Score	*Tally*	*Frequency*	*Angle*
1			$\frac{\quad}{20} \times 360° = \quad °$
2			$\frac{\quad}{20} \times 360° = \quad °$
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:

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



OS 5.3 *Vertical Line Graph*

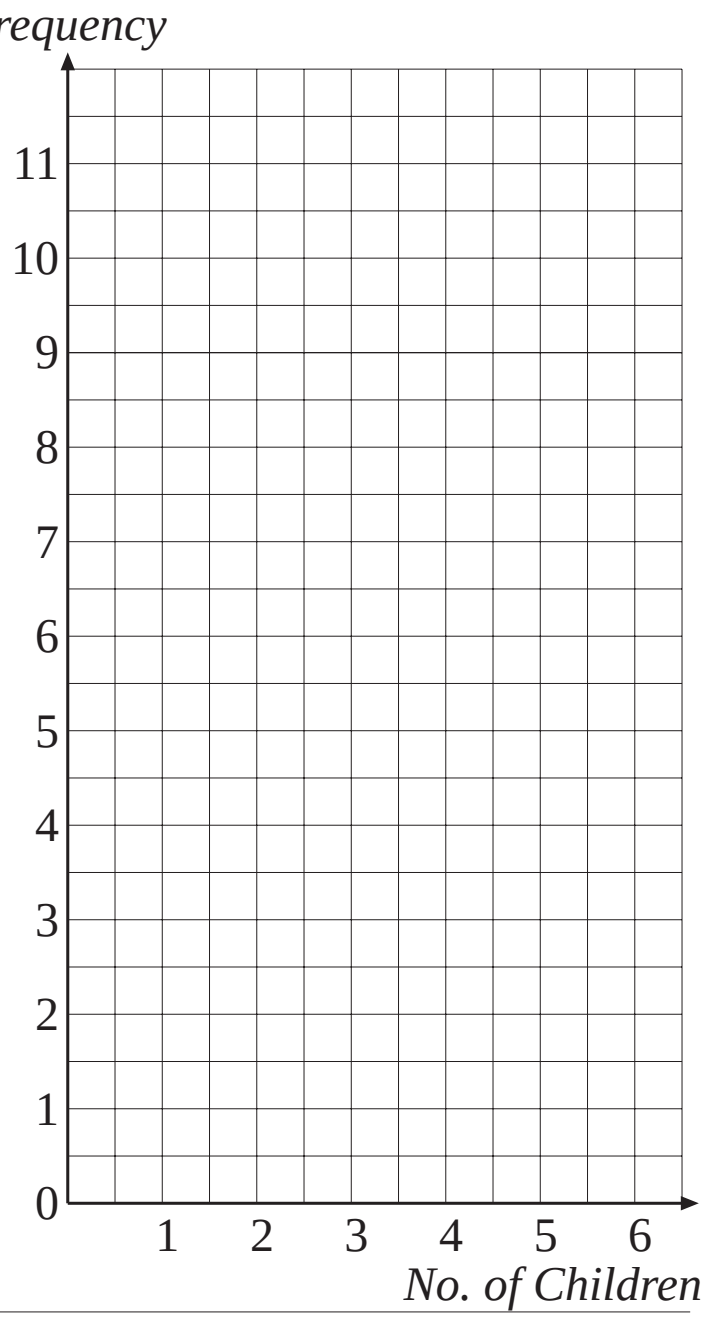
A class collected data on the number of children in their families.

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.

No. of Children	*Tally*	*Frequency*
1		
2		
3		
4		
5		
6		



OS 5.4 *Mean and Range*

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

Mean $= \dfrac{\qquad\qquad\qquad\qquad}{4}$

$=$

Range $=$ ——

$=$

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

Score	*Frequency*	*Score* $\times$ *Frequency*
0	2	$0 \times 2 = 0$
1	7	
2	8	
3	3	
4	2	
5	4	

Mean $=$ ——————————

$=$

Range $=$ ——

$=$

OS 5.5 *The Mode*

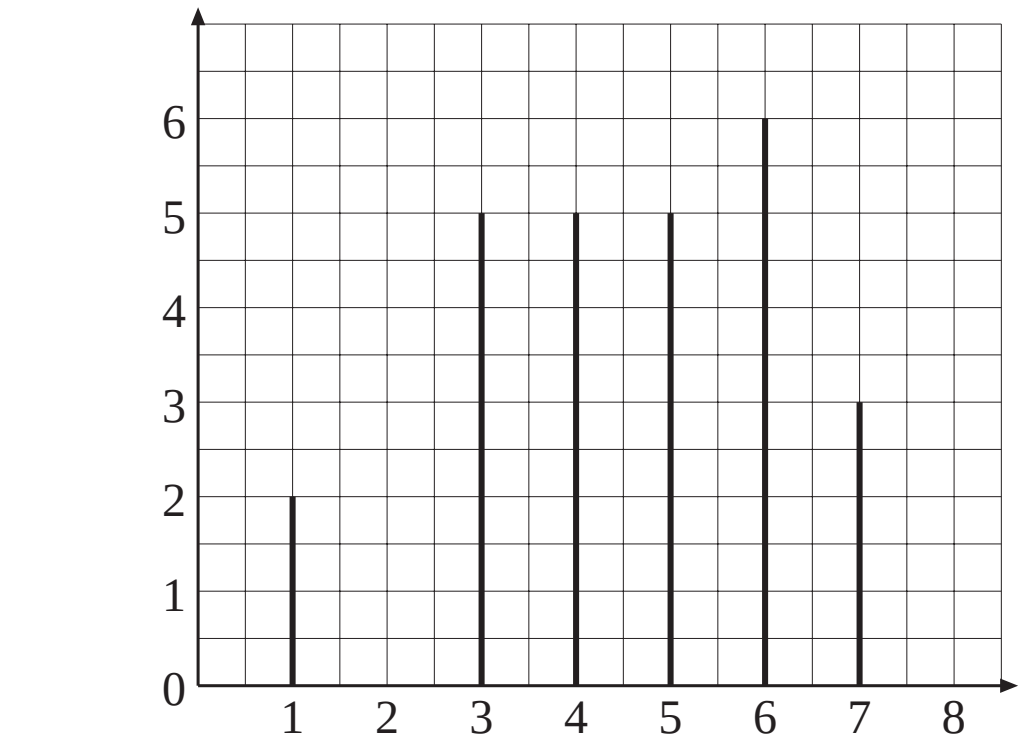
1. Calculate the *mode* of this set of data:

   3 7 4 3 7 2 1 6

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

Score	*Frequency*
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:



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:

Score	*Frequency*
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?