

YEAR 8 MATHEMATICS

STATISTICS PRE-ASSESSMENT

Chapter 8A-8E:

Student name: _____

Date: _____

Time: 20 minutes

Total: 12 marks

Purpose: This is a diagnostic assessment. It is not for grading. It will help identify what you already know and what we need to learn.

Instructions: Complete all questions. Show working where requested. If you are unsure, have a go.

Question 1 - Interpreting a table [2 marks]

The table shows the number of books read by four students during one month.

Student	Books read
Mia	5
Noah	8
Ava	3
Jack	6

a. Who read the most books? _____

b. How many more books did Noah read than Ava? _____

Question 2 - Interpreting data [2 marks]

A class survey produced the following results.

Favourite sport	Number of students
Basketball	8
Soccer	12
Tennis	4
Swimming	6

a. Which sport was the most popular? _____

b. How many students participated in the survey altogether? _____

Question 3 - Frequency tables [2 marks]

The following data show the number of pets owned by 10 students:

1, 2, 0, 1, 3, 2, 1, 0, 2, 1

Complete the frequency table.

Number of pets	Frequency (<i>Hint count how many are 0, 1, ...</i>)
0	
1	
2	
3	

Question 4 - Range [2 mark] (*hint range is difference between the smallest number to highest*)

The scores are: 6, 10, 4, 8, 12

Calculate the range. Show your working.

Range = _____

Question 5 - Mean [2 marks] (*hint mean is adding all numbers in a set divided by total count of numbers*)

The number of goals scored in five games was: 3, 5, 4, 6, 2

Calculate the mean. Show your working.

Mean = _____

Question 6 - Median [1 marks] (*hint: middle number in a set when numbers are put in order smallest to largest*)

Find the median of: 9, 3, 7, 5, 11

Show your working.

Median = _____

Question 7 - Mode [1 mark] (*hint mode is a value that appears most frequently in a data*)

Find the mode of: 4, 7, 5, 7, 3, 7, 4

Mode = _____

Student confidence check (not marked)

Circle one: Very confident Somewhat confident Not yet confident

One statistics topic I already feel confident with: _____

One statistics topic I think I need to learn more about: _____