

Monyetla Bursary Project

Grade 11

Lesson 4: Data Handling Questions

QUESTION 1:

1.1 Table 3 below indicates the BMI and classification of weight status for individuals.

TABLE 3: BMI and weight status for individuals

| BMI (kg/m ²) | Classification of weight status |
|--------------------------|---------------------------------|
| below 18,5 | Underweight |
| 18,5 – 24,99 | Normal |
| 25 – 29,99 | Overweight |
| 30 and higher | Obese |

Use the information in Table 3 to answer the questions that follow.

1.1.1 Determine the BMI (in kg/m²) and weight status of a girl with a mass of 65 kg and a height of 142 cm. (5)

The following formula may be used:

$$BMI = \frac{\text{weight}}{\text{height in } m^2}$$

1.1.2 What advice might a doctor give to a child with the BMI in 3.1.1? (2)

QUESTION 2:

2.1 A visitor to the Kruger Park recorded the following numbers of impala seen in 15 days:

25 80 34 26 21 65 28 21 39 21 30 34 21 28 40

2.1.1 Determine the median number of impala seen. (2)

2.1.2 Calculate the mean number of impala seen in 15 days. (3)

2.1.3 Determine the range of the number of impala seen. (2)

QUESTION 3:

3.1 The Grade 11A class was given an English Language test out of 100 last week. These were the results in ranked order:

23 41 42 50 50 51 54 55 56 57
60 61 65 66 66 67 68 69 70 70
70 72 74 74 76 79 82 85 86 88

3.1.1 Calculate the mean mark. (3)

3.1.2 Find the mode. (2)

3.1.3 Calculate the median mark. (2)

3.2 Which measure of central tendency in Question 3.1 tells you the most about how the class performed in the test? Give a reason for your answer. (2)

3.3 Calculate the range of the test marks. (2)