LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

# SEKHUKHUNE SOUTH DISTRICT


# MATHEMATICAL LITERACY

## GRADE 10

## CONTROLLED TEST

## TERM 1

## 18 MARCH 2025

**MARKS : 50** **DURATION : 1 HOUR**

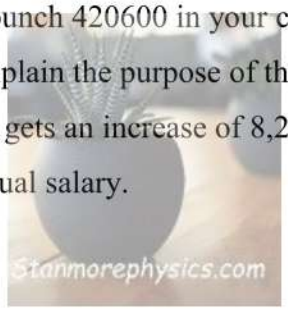
**QUESTION 1**

1.1 Mr Ratau is a teacher at Naledi high school. He earns an annual income of R420 600

1.1.1 Write down R420 600 in words. (2)

1.1.2 When you punch 420600 in your calculator, it sometimes comes out as 420,600. Explain the purpose of the comma. (2)

1.1.3 If Mr Ratau gets an increase of 8,2% on his annual salary next year. Calculate his new annual salary. (3)




1.2

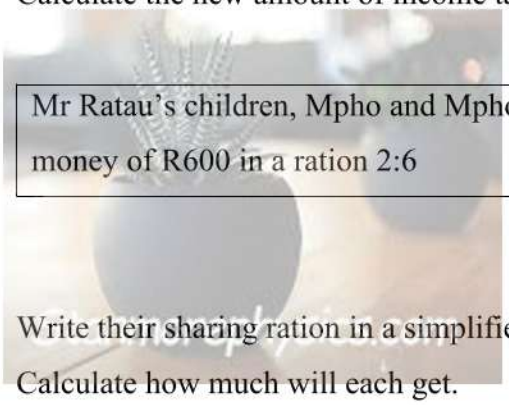
| |
|---|
| Mr Ratau will be paying 30% of his total annual salary to income tax next year. |

1.2.1 Convert 30% to decimal number. (2)

1.2.2 Calculate the new amount of income tax he will pay. (2)

1.3

| |
|---|
| Mr Ratau's children, Mpho and Mphonyana must share a pocket money of R600 in a ration 2:6 |



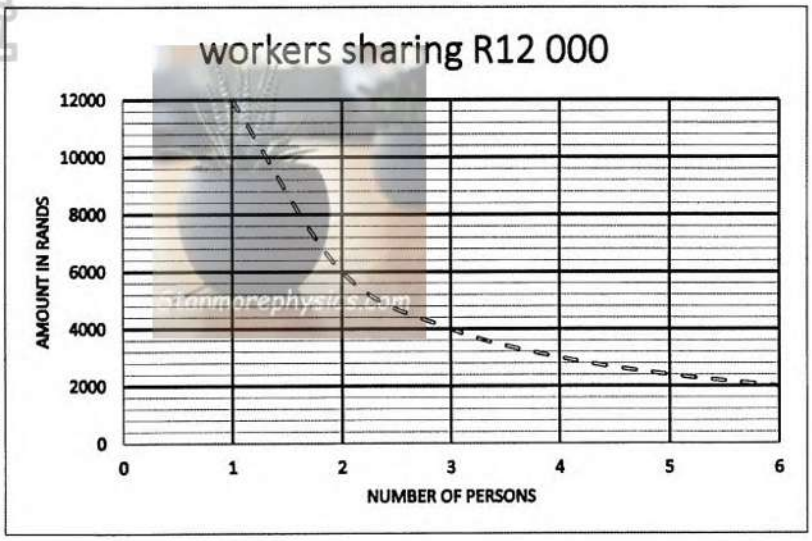
1.3.1 Write their sharing ration in a simplified form. (2)

1.3.2 Calculate how much will each get. (4)

**[17]**

**QUESTION 2**

2.1 The graph below represents the relationship between the amounts each worker receives after sharing a pay out of R12 000 for doing a particular job.




2.1.1 Write the type of proportion (relationship) that is represented above? (2)

2.1.2 Choose which formula of the following will be used to best represent the graph above:

A Amonut = $\frac{12\,000}{\quad}$

B Amount = R12 000 × Number of person

(2)

2.1.3 Give one reason why the line graph is represented as a dotted line. (2)

2.1.4 Calculate the amount each person will receive if only three people are working on the job. (3)

2.1.5 Determine the dependent and independent variables on the graph. (4)

**[13]**

## QUESTION 3

3.1

In South Africa most people spend their leisure time watching soccer. The table below reflects the statistics of the DSTV Premiers Soccer League played in one season (2021/2022).

Note: - All teams played equal number of games

- Points are earned from games WON and DRAWN

**TABLE 3: DSTV PREMIERSHIP TABLE FOR THE 2021/2022**

| TEAMS | MATCHES PLAYED | GOAL SCORED | POINTS |
|---|---|---|---|
| 1. Mamelodi Sundowns | 30 | 56 | **65** |
| 2. Cape Town City | 30 | 32 | **49** |
| 3. Royal AM | 30 | 43 | **47** |
| 4. Stellenbosch | 30 | 32 | **47** |
| 5. Kaizer Chiefs | 30 | 34 | **47** |
| 6. Orlando Pirates | 30 | 34 | **44** |
| 7. Amazulu | 30 | 24 | **41** |
| 8. SuperSport United | 30 | 36 | **40** |
| 9. Golden Arrows | 30 | 35 | **38** |
| 10. Gallants | 30 | 22 | **34** |
| 11. Sekhukhune | 30 | 21 | **33** |
| 12. Maritzburg United | 30 | 22 | **31** |
| 13. TS Galaxy | 30 | 22 | **30** |
| 14. Chippa United | 30 | 22 | **29** |
| 15. Swallows | 30 | 22 | **26** |
| 16. Baroka | 30 | 22 | **25** |

*Source: https/supersport.comlos*

3.1.1 How many teams played the Premiers Soccer League in 2021/2022 season? (2)

How many games did each team play in 2021/2022 season? (2)

3.1.2 Calculate the range of the goal scored. (3)

3.1.3 Calculate the mean of the goals scored by the teams.

( Rounded to a whole number). (4)

3.1.4 Determine the mode of the goals scored by the teams. (2)

3.1.5 Is the above data discrete or continuous? Give a reason for your answer. (3)

3.2 Copy the Table in your answer book and complete the Tally-Frequency of points in 2021/2022

| Class interval (Goal scored) | Tally | Frequency |
|---|---|---|
| 21 – 25 | / | 1 |
| 26 – 30 | /// | (a) |
| 31 – 35 | (b) | 3 |
| 36 – 40 | // | (c) |
| 41 – 45 | // | 2 |
| 46 – 50 | (d) | 4 |
| 51 – 55 | / | 1 |

(4)

**[20]**

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# MATHEMATICAL LITERACY

## GRADE 10

## MEMORUNDUM

## TERM 1 TEST

## 18 MARCH 2025



**Marks 50**

| | | | |
|---|---|---|---|
| **QUESTION 1** | | | |
| 1.1 | | | |
| | 1.1.1 | Four hundred and twenty thousand six hundred rands ✓✓ | (2) |
| | 1.1.2 | The comma is a thousand separator. ✓✓ | (2) |
| | 1.1.3 | R420 600$\times\frac{8,2}{100}$ = R34 489,20 ✓<br>R34 489,20 + R420 600 ✓ = R455 089,20✓<br>OR<br>R420 600✓ $\times\frac{108,2}{100}$ ✓= R34 489,20 ✓ | (3) |
| 1.2 | | | |
| | 1.2.1 | $\frac{30}{100}$ ✓ = 0.3 ✓ | (2) |
| | 1.2.2 | R420 600$\times\frac{30}{100}$ ✓ = $R126\ 180$ ✓ | (2) |
| 1.3 | | | |
| | 1.3.1 | Mpho : mphonyana<br>2 : 6<br>1 ✓ : 3 ✓ | (2) |
| | 1.3.2 | 2 + 6 = 8 ✓<br>Mpho<br>$\frac{2}{8}\times R600$ ✓<br>= R150 ✓<br>Mphonyana<br>$\frac{6}{8}\times R600$<br>= R450 ✓ | (4) |
| | | | **[17]** |
| **QUESTION 2** | | | |
| 2.1 | | | |
| | 2.1.1 | Indirect proportion or Inverse proportion ✓✓ | (2) |
| | 2.1.2 | A. ✓✓ | (2) |

| | | | |
|---|---|---|---|
| | 2.1.3 | Because the number of persons is discrete. ✓✓ | (2) |
| | 2.1.4 | R12 000÷3 ✓ = R4 000 ✓ | (3) |
| | 2.1.5 | Independent variable :Number of persons ✓✓<br>Dependent variable :Amounts in Rands ✓✓ | (4) |
| | | | **[13]** |
| | | **QUESTION 3** | |
| 3.1 | | | |
| | 3.1.1 | 16 teams ✓✓ , 30 games ✓✓ | 2 RT<br>2 RT |
| | 3.1.2 | Range = 56 – 21 ✓✓<br>Range = 35 ✓ | 1 RT<br>1 M<br>1 A |
| | 3.1.3 | Mean = $\frac{56+32+43+32+34+34+24+36+35+22+21+22+22+22+22+22}{16}$ ✓<br>Mean = $\frac{479}{16}$✓ Mean = 29,92375✓ mean = 30✓ | 1 Method<br>1Simplification<br>1 Accuracy<br>1 Rounding |
| | 3.1.4 | Mode = 22 ✓✓ | 2 RT |
| | 3.1.5 | Discrete✓,they carry whole number ✓✓ | 1 A<br>2 R |
| | 3.1.6 | Continuous data ✓✓ , the data can be measured in mass(Kg) ✓ | 2 A<br>1 R |
| 3.2 | (a) - 6 ✓<br>(b) - ~~////~~ /// ✓<br>(c) - 1 ✓<br>(d) - //// | | 1 (a)<br>1 (b)<br>1 ©<br>1 (d) |
| | | | **[20]** |