Province of the
EASTERN CAPE
EDUCATION

ANW DISTRICT

GRADE 9

MATHEMATICS
TERM 1 ASSIGNMENT
2026

SCHOOL NAME	
LEARNER NAME	

TOTAL MARKS: 50

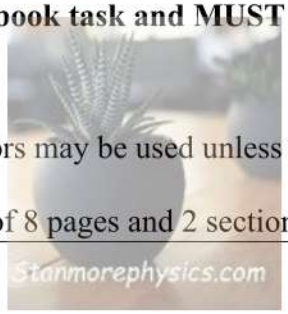
TIME: 2 hours

LEARNER MARK

50

Instructions to the learner

1. Read all the instructions carefully.
2. Answer all the questions in the spaces provided.
3. **For Questions 1 – 11, all working MUST be shown and thereafter the correct answer must be chosen by circling it.**
4. The Assignment is out of 50 marks.
5. The duration is 2 hours.
6. **The Assignment is an open book task and MUST be administered under the supervision of the educator, .**
7. Approved scientific calculators may be used unless stated otherwise.
8. This question paper consists of 8 pages and 2 sections.



SECTION A [Multiple Choice]

1. The lowest common multiple of (LCM) of 60 and 144 is equal to: 3

_____

_____

_____

_____

_____

_____

A. 144
B. 60
C. 720
D. 12

2. The highest common factor (HCF) of 60 and 144 is equal to: 2

A. 144
B. 60
C. 720
D. 12

3. Write the following ratio in a simplified form: 2

$4 : 4\frac{1}{2}$

A. $1 : \frac{1}{2}$
B. $1 : 1\frac{1}{2}$
C. $1 : 2$
D. $8 : 9$

4. A recipe to make 36 biscuits uses 4 eggs. If I have 7 eggs how many biscuits will I bake? 3

A. 63
B. 70
C. 20,5
D. 60

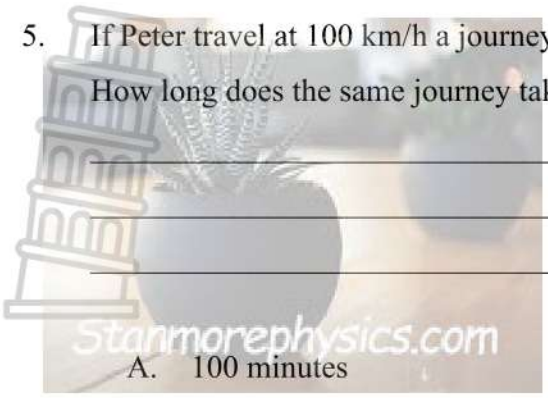
5. If Peter travel at 100 km/h a journey takes 40 minutes. 3

How long does the same journey takes if he travel at 80 km/h?

_____

_____

_____



A. 100 minutes

B. 50 minutes

C. 32 minutes

D. 60 minutes

6. Decrease 90 in the ratio 2 : 3 3

_____

_____

_____

A. 70
B. 80
C. 60
D. 30

7. Write the ratio 24 to 36 in its simplest form: 1

_____

_____

A. 12: 18
B. 2: 3
C. 8: 12
D. 4: 6

8. Phetolo works as a sales assistant for a cell phone company. 4

He earns a basic salary of R5 000 per month as well as a 10% commission for cell phones sold above monthly quota.

If the monthly quota is R12 000 and he sells phone to the value of R35 000 in the month, how much will Phetolo earn for the month.

A. R 7 300
B. R 8 500
C. R 17 000
D. R 8 000

9. Which word best describes $-\sqrt{3}$ 1

A. Rational
B. Integer
C. Undefined
D. Irrational

10. On a certain day a cell phone store sold iphones, Samsungs and Huaweis in the ratio 2: 3: 5. 3
If they sold 15 Huaweis, how many cellphones did they sell altogether?

A. 20
B. 30
C. 100
D. 150

11. Below are the rates of a certain Car rental company. 3

How much will you pay if you travelled 1000 km?

A. $R\ 3\ 981{,}08$
B. $R\ 3\ 127{,}99$
C. $R\ 3\ 412{,}36$
D. $R\ 3\ 696{,}72$

[28]

SECTION B

12. Complete the following table. 4

	Natural Numbers ($\mathbb{N}$).	Whole Numbers ($\mathbb{N}o.$)	Integers ($\mathbb{Z}$)	Rational Numbers ($\mathbb{Q}$)	Irrational Numbers ($\mathbb{Q}'$)
E.g -3	x	x	✔	✔	x
0					
$\sqrt{99}$					
$\frac{16}{8}$					
0,212121					

13. Ikanyeng invests R60 000 for 5 years at 11,5% p.a. compounded annually.

13.1 Calculate the amount that he will receive after 5 years. 3

13.2 How much interest did he earn? 2

14. Calculate without using a calculator:

14.1 $-(-4)^2 - \sqrt{6^2} - (-2)^3$ 4

14.2 $\sqrt{-4 \times -9 + 8^2}$ 3

14.3 $\frac{6 + 3 \times 7}{-3}$ 2

15. Cnsider the following table below:

x	6	5	b
y	5	a	10

15.1 Is this an example of a direct or indirect proportion? Give a reaon for your answer. 2

15.2 Calculate the values of a and b 2

22

TOTAL MARKS:50

Province of the
EASTERN CAPE
EDUCATION

ALFRED NZO WEST

MATHEMATICS **FEBRUARY 2026**

GRADE 9 **2 HOURS**

ASSIGNMENT **50 MARKS**

MARKING GUIDELINE

This marking guideline consists of 7 pages.

Different methods can be used.

SECTION A

1.	The lowest common multiple of (LCM) of 60 and 144 is equal to $60 = 2^2 \times 3 \times 5$ ✓ $144 = 2^4 \times 3^2$ ✓ The LCM of 60 and 144 = $2^4 \times 3^2 \times 5$ $= 720$ C. 720 ✓	3 RP
2.	The highest common factor (HCF) of 60 and 144 is equal to: $60 = 2^2 \times 3 \times 5$ $144 = 2^4 \times 3^2$ The LCM of 60 and 144 = $2^2 \times 3$ ✓ $= 12$ *D.* 12✓	2 K
3.	Write the following ratio in a simplified form: $4 : 4\frac{1}{2}$ $= \frac{8}{2} : \frac{9}{2}$ ✓ $= 8 : 9$ D. 8 : 9✓ or $= 4 : 4{,}5$ $= 40 : 45$ $= \frac{40}{5} : \frac{45}{5}$ ✓ $= 8 : 9$	2 CP
4.	A recipe to make 36 biscuits uses 4 eggs. If I have 7 eggs how many biscuits will I bake? *1 egg will make* $= \frac{36}{4}$ *biscuits*✓ $= 9$ *biscuits* ∴ *7 eggs will make* 7×9✓ ∴ *7 eggs will make 63 biscuits* Or Eggs | 4 | 7 Biscuits | 36 | x $x = \frac{36 \times 7}{4}$ ✓✓ $x = 63$	3 PS

	A. 63✓	
5.	If Peter travel at 100 km/h a journey takes 40 minutes. How long does the same journey takes if he travel at 80 km/h? Speed(km/h) | 100 | 80 Time (minutes) | 40 | x $x \times 80 = 40 \times 100$✓ $x = \frac{4000}{80}$ ✓ $x = 50$ B. 50 minutes✓	3 RP
6.	Decrease 90 in the ratio 2 : 3 $= 90$✓ $\times \frac{2}{3}$ ✓ $= \frac{180}{3}$ $= 60$ C. 60 ✓	3 RP
7.	Write the ratio 24 to 36 in its simplest form: $= \frac{24}{12} : \frac{36}{12}$ $= 2 : 3$ $B. 2:3$✓	1 K
8.	Phetolo works as a sales assistant for a cell phone company. He earns a basic salary of R5 000 per month as well as a 10% commission for cell phones sold above monthly quota. If the monthly quota is R12 000 and he sells phones to the value of R35 000 in the month, how much will Phetolo earn for the month. $= R35\,000 - R12\,000$ $= R23\,000$✓ $10\%\ of\ R23\,000$ $= \frac{10}{100} \times R23\,000$	4 CP

	$= R2\,300$✓ $\therefore He\ will\ earn\ R5000 + R2\,300$ ✓ $= R7\,300$ A. R 7 300✓	
9.	Which word best describes $-\sqrt{3}$ D. Irrational✓	1 K
10	On a certain day a cell phone store sold iphones, Samsungs and Huaweis in the ratio 2: 3: 5. If they sold 15 Huaweis, how many cellphones did they sell altogether? $Total\ ratio = 2 + 3 + 5$ $= 10$✓ $Let\ x\ be\ the\ total\ number\ of\ cellphones\ sold.$ $\frac{5}{10}\ of\ x = 15$ $\frac{1}{2}x = 15$ ✓ $\therefore x = 30$ The number of cellphones sold altogether is 30. Or $\frac{5}{10}\ of\ total = 15$ ✓ $\frac{1}{10}\ of\ total = 15 \div 5 = 3$ $\therefore Total = 3 \times 10$✓ B. 30✓	3 CP
11	Below are the rates of a certain Car rental company.	3 PS

How much will you pay if you travelled 1000 km?

$total + 10\%\ of\ total\ for\ additional\ 100km +$
$10\%\ of\ total\ for\ additional\ 100km\ +$
$10\%\ of\ total\ for\ additional\ 100km +$
$10\%\ of\ total\ for\ additional\ 100km$ ✓

$= R\ 2\ 843{,}63 + \ + 284{,}363 + 284{,}363 + \ 284{,}363 + 284{,}363$ ✓

$= R\ 3\ 981{,}08$

A. $R\ 3\ 981{,}08$✓

[28]

SECTION B

12. Complete the following table. **4 K**

	Natural Numbers (N).	Whole Numbers (No.)	Integers (Z)	Rational Numbers (Q)	Irrational Numbers (Q')
E.g -3	x	x	✔	✔	x
0	x	✔	✔	✔	x ✓
$\sqrt{99}$	x	x	x	x	✔ ✓
$\frac{16}{8}$	✔	✔	✔	✔	X ✓
0,212121	x	x	x	✔	x ✓

Marking guide:
Allocate 1 mark per row. Allocate full mark if one answer is incorrect in a row. If two or more in a row are incorrect, do not allocate a mark.

13.	Ikanyeng invests R60 000 for 5 years at 11,5% p.a. compounded annually. Calculate the amount that he will receive after 5 years. $A = P(1 + i)^n$ ✓ $= 60\,000(1 + 0{,}115)^5$ $= 60\,000(1{,}115)^5$✓ $= R103\,401{,}20$✓ How much interest did he earn? Interest $= R103\,401{,}20 - R60\,000$ ✓ $= R43\,401{,}20$✓	3 RP 2
14.	Calculate without using a calculator:	
14.1	$-(-4)^2 - \sqrt{6^2} - (-2)^3$ $= -16$✓ $- 6$ ✓ $+ 8$✓ $= -14$✓	4 RP
14.2.	$\sqrt{-4 \times -9 + 8^2}$ $= \sqrt{36 + 64}$ ✓ $= \sqrt{100}$ ✓ $= 10$✓	3 RP
14.3	. $\frac{6 + 3 \times 7}{-3}$ $= \frac{6+21}{-3}$✓ $= \frac{27}{-3}$ $= -9$✓	2 RP

15.	Cnsider the following table below: x | 6 | 5 | b y | 5 | a | 10	
15.1	Is this an example of a direct or indirect proportion? Give a reaon for your answer. Indirect proportion. ✓ As the x values decrease the y values inrease by the same proportion. ✓	2 K
15.2	Calculate the values of a and b $a = \frac{5 \times 6}{5}$ $a = 6$✓ $b = \frac{5 \times 6}{10}$ $a = 3$✓	2 RP
		22

TOTAL MARKS:50