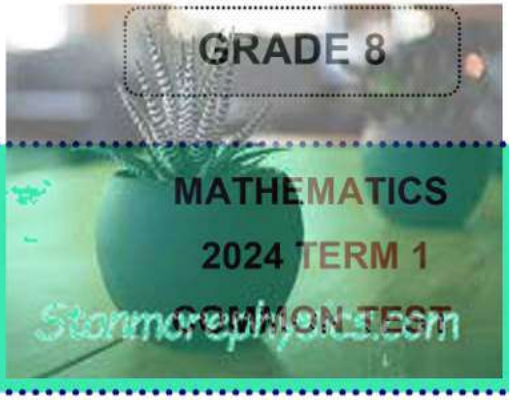
LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

VHEMBE WEST DISTRICT

Liberty through Knowledge



GRADE 8

MATHEMATICS

2024 TERM 1

COMMON TEST

MARKS: 50

DURATION: 1 HOUR

INSTRUCTIONS AND INFORMATION

Read the following instructions carefully before answering the questions.

1. **This Question paper consists** of 5 pages **including the cover page.**
2. This question paper consists of 5 questions.
3. Answer all questions.
4. Number your answers exactly as the questions are numbered in the question paper.
5. Read through the questions carefully and make sure that you allocate enough time for each question.
6. You may use an approved scientific calculator (Non-programmable and Non-graphical).
7. Clearly show ALL the calculations.
8. If necessary, round off to TWO decimal places unless otherwise stated.
9. Answers alone will not necessarily earn full marks.
10. It is in your best interest to write legibly and present your work neatly.

QUESTION NUMBER	QUESTION ITEMS	MARK ALLOCATION
1	**MULTIPLE CHOICE** Choose the letter with the correct answer e.g. 1.1 E	**[5 MARKS]**
1.1	The car travels a distance of 80km in 30 minutes? Calculate it`s average speed. **A.** 80 km/h **B.** 40 km/h **C.** 160 km/h **D.** 20 km/h	(1)
1.2	Calculate: 13,78 × 2,11= **A.** 15,89 **B.** 29,0758 **C.** 92,7508 **D.** 29,0875	(1)
1.3	A bag was bought for R250 and sold for R350.Calculate the percentage increase. **A.** 50% **B.** 25 % **C.** 40 % **D.** 20%	(1)
1.4	Calculate: [5 − (8− 16) + 5] **A.** −2 **B.** 18 **C.** 16 **D.** 13	(1)
1.5	The value of $\sqrt{0,25}$ is …… **A.** 0.2 **B.** 0.5 **C.** 0.05 **D.** 0,15	(1)

2	**WHOLE NUMBERS**	**[13 MARKS]**
2.1	Write 124 as a product of its prime factors	(1)
2.2	Find the HCF of 24 and 32	(3)
2.3	Find the LCM of 12 and 18	(3)
2.4	Divide R500 between Mulweli and Lloyd in the ratio of 6:4	(3)
2.5	A packet of apples cost R22 excluding VAT. What will the price of the apples be once 14% VAT is added to the price?	(3)
3	**INTERGERS**	**[12 MARKS]**
	Calculate the following and show all the steps	
3.1	$-23-(-18)$	(2)
3.2	$2(8-3+4)$	(2)
3.3	$3^3+4^2-5^2$	(3)
3.4	$\sqrt{9+16}+7$	(2)
3.5	$\frac{-6+3(-4)-3(4)}{(2+3)(-3)}$	(3)
4	**COMMON FRACTIONS**	**[11MARKS]**
4.1	Calculate: $10 \div \frac{5}{8}$	(3)
4.2	Simplify: $\sqrt{\frac{25}{49}}$	(2)
4.3	Simplify: $\sqrt[3]{\frac{8}{27}}+\left(\frac{1}{2}\right)^2$	(3)
4.4	Determine the percentage decrease if a chocolate that cost R10 is marked down to R7	(3)

5	**DECIMAL FRACTIONS**	**[9]**
	Calculate:	
5.1.	0,12× 0,06	(2)
5.2	0,064 ÷ 0,4	(3)
5.3	$(0,7)^3$	(2)
5.4	$\sqrt{0,16}$=	(2)
	TOTAL= 50 MARKS	

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GRADE 8

MATHEMATICS

2024 TERM 1

COMMON TEST MEMORANDUM

MARKS: 50

This Memorandum consists of 5 pages including the Cover page.

This is a MARKING GUIDELINE.

Award any correct Mathematical procedures displayed by Learners.

QUESTION NUMBER	QUESTION ITEMS	MARK ALLOCATION
1	**MULTIPLE CHOICE**	**[5 MARKS]**
1.1	C✓	(1)
1.2	B✓	(1)
1.3	C✓	(1)
1.4	B✓	(1)
1.5	B✓	(1)
2	**WHOLE NUMBERS**	**[13 MARKS]**
2.1	$2\times 2\times 31$ ✓	(1)
2.2	HCF of 24 and 32 2 | 24 2 | 12 2 | 6 3 | 3 | 1 2 | 32 2 | 16 2 | 8 2 | 4 2 | 2 | 1 24:2X2X2X3 32:2X2X2X2X2✓✓ ∴ HCF=2X2X2=8✓	(3)
2.3	LCM of 12 and 18 2 | 12 2 | 6 3 | 3 | 1 2 | 18 2 | 9 3 | 9 3 | 3 | 1	(3)

	✓✓ ∴LCM=2X2X3X3=36✓	
2.4	Divide R500 between Mulweli and Lloyd in the ratio of 6:4 6+4 = 10 ✓ Mulweli $=\frac{6}{10}\times$R500 =R300✓ Lloyd= $\frac{4}{10}\times$R500 =R200 ✓	(3)
2.5	A packet of apples cost R22 excluding VAT. What will the price of the apples be once 14% VAT is added to the price? =R22× $\frac{14}{100}$✓ $=\frac{308}{100}$ =R3,08✓ Selling price=R22 +R3,08 =R25,08✓	(3)
3	**INTERGERS**	**[12 MARKS]**
	Calculate the following and show all the steps.	
3.1	− 23 − (− 18) $= -23 + 18$✓ $= -5$✓	(2)
3.2	2(8−3+4) $= (2 \times 8) - (2 \times 3) + (2 \times 4)$ $= 16 - 6 + 8$ $= 10 + 8$✓ $= 18$✓	(2)
3.3	$3^3 + 4^2 - 5^2$ $= 27 + 16 - 25$✓ $= 43 - 25$✓ $= 18$✓	(3)

3.4	$\sqrt{9+16}+7$ $=\sqrt{25}+7$ ✓ $=5+7$ $=12$ ✓	(2)
3.5	$\frac{-6+3(-4)-3(4)}{(2+3)(-3)}$ $=\frac{-6-12-12}{5(-3)}$ $=\frac{-30}{-15}$ ✓ ✓ $=2$ ✓	(3)
4	**COMMON FRACTIONS**	**[11MARKS]**
4.1	$10 \div \frac{5}{8}$ $=\frac{10}{1}\times\frac{8}{5}$ ✓ $=\frac{80}{5}$ ✓ $=14$ ✓	(3)
4.2	Simplify: $\sqrt{\frac{25}{49}}$ $=\frac{5}{7}$ ✓ ✓	(2)
4.3	Simplify: $\sqrt[3]{\frac{8}{27}}+\left(\frac{1}{2}\right)^2$ $=\frac{2}{3}+\frac{1}{4}$ ✓ $=\frac{2}{3}\times\frac{4}{4}+\frac{1}{4}\times\frac{3}{3}$ $=\frac{8}{12}+\frac{3}{12}$ ✓ $=\frac{11}{12}$ ✓	(3)
4.4	% decrease$=\frac{original\ amount-decreased\ amount}{original\ amount}\times 100$ $=\frac{10-7}{10}\times 100$ ✓ $=\frac{3}{10}\times 100$ $=\frac{300}{10}$ ✓ $=30\%$ ✓	(3)

5	DECIMAL FRACTIONS	[9 MARKS]
	Calculate:	
5.1.	$0,12\times 0,06$ $=\frac{12}{100}\times\frac{6}{100}$ ✓ $=\frac{72}{10\,000}$ $=0,0072$ ✓	(2)
5.2	$0,064 \div 0,4$ $=\frac{64}{1\,000}\div\frac{4}{10}$ ✓ $=\frac{64}{1\,000}\times\frac{10}{4}$ ✓ $=\frac{640}{4\,000}$ $=0,16$ ✓	(3)
5.3	$(0,7)^3$ $=0,7\times 0,7\times 0,7$ ✓ $=0,343$ ✓	(2)
5.4	$\sqrt{0,16}$ $=\sqrt{\frac{16}{100}}$ ✓ $=\frac{4}{10}$ $=0,4$ ✓	(2)
	TOTAL= 50 MARKS	