Name of School:	
Grade and class:	
Name of Learner:	

60

GRADE 8
MATHEMATICS
JUNE 2026

MARKS: 60

TIME: 1 HOUR 30 MIN

This paper consists of 9 pages, including the cover page.

INSTRUCTIONS

Read the following instructions carefully, before starting with the question paper.

1. This paper consists of **7 questions.**
2. Answer all the questions in the spaces provided **on this paper**.
3. Show all calculations as ANSWERS ONLY will not necessarily be awarded full marks.
4. You may use an approved calculator, unless stated otherwise.
5. If necessary, round off answers to TWO decimal places, unless stated otherwise.
6. Write neatly and legibly.

QUESTION 1

For each of the following questions, choose the correct answer. **Circle** the letter next to the correct answer.

1.1	Which of the following is the list of prime factors of 144? A $2^2 \times 3^2 \times 4$ B $2^3 \times 3 \times 6$ C $2^4 \times 3^2$ D $2^4 \times 9$	(1)
1.2	What is the additive **and** multiplicative inverse of -2? A 2 and $\frac{1}{2}$ B -2 and $-\frac{1}{2}$ C $-\frac{1}{2}$ and -2 D 2 and $-\frac{1}{2}$	(1)
1.3	Simplify the following: $\sqrt[3]{\sqrt{64}}$ A 2 B 4 C 8 D 16	(1)
1.4	Represent the decimal as a common fraction: $0{,}125$ A $\frac{1}{125}$ B $\frac{12{,}5}{1000}$ C $\frac{125}{100}$ D $\frac{1}{8}$	(1)

1.5	Simplify: $3a^2 + 3a^3 - 2a^2$ A $6a^5 - 2a^2$ B $4a^3$ C $3a^2 + 3a^3 - 2a^2$ D $a^2 + 3a^3$	(1)
1.6	If 1$ = R16,95, what will you pay (in $) in America for a car that costs R255 999 in South Africa? A $4 339 183,05 B $43 391,19 C $255 982,05 D $15 103,19	(1)
		[6]

QUESTION 2		
2.1	A box contains 120 apples. Lisa, Aya and Indi share apples in a ratio of 4:7:1. How many apples will Aya receive?	(3)
2.2	Simplify without using a calculator. Show all your calculations. $\sqrt{144} - (-3^2) + (-2)^4$	(3)

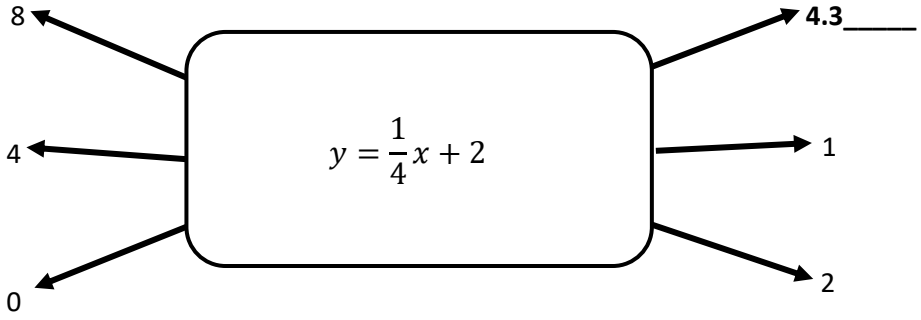
2.3	In an online strategy game, the team with the highest total score wins. The following points were scored by team A: $-44, 8, 12$ and team B scored: $10, 0, -35$. Which team won the game?	(2)
		[8]

QUESTION 3		
3.1	Calculate the following, without the use of a calculator and show all your steps.	
3.1.1	$\left(\frac{7}{8}-\frac{10}{32}\right)\times\frac{4}{9}$	(3)
3.1.2	James is awake for 16 hours per weekday. $\frac{1}{4}$ of the time he spends with his family, $\frac{1}{5}$ of the time he spends doing tasks around the house and getting ready for work. $\frac{3}{6}$ of the time he spends at work. The remaining time he spends travelling to work and back. Determine how many **minutes** it takes him to travel to and from work.	(5)

3.2	Determine the percentage decrease if the price of a pair of shoes is reduced from R250 to R50.	(2)
		[10]

QUESTION 4		
4.1	Consider the following pattern: 12; 17; 22; 27; ...; ...;	
	4.1.1 Find the next 2 terms of the pattern.	(2)
	4.1.2 Describe the rule for the pattern in your own words.	(1)
	4.1.3 Use the rule $T_n = 5n + 7$ to find the 50th term.	(2)
4.2	Consider the pattern below:	
		
Which diagram will contain 1000 unshaded (white) squares?		(1)

4.3 Use the given rule to determine the missing output value labelled (4.3) in the flow diagram below. (1)



4.4 Use the table below to answer the questions that follow.

x	-2	-1	0	1	2	3			**A**
y	-5	-1	3	7	11	15		.....	35

4.4.1 Write down the rule in the form $y = \cdots$ (1)

4.4.2 Determine the value of A. (2)

[10]

QUESTION 5

5.1 Simplify the following expressions WITHOUT the use of a calculator. Show ALL steps.

5.1.1 $\frac{(4^2)^2}{4^8}$ (2)

5.1.2 $-3ab^3 \times -5a^3b^3$ (1)

5.1.3 $(4xy)^0 \times \frac{(x^3y^2)^2}{xy^2}$ (3)

5.2 Write $2^{29} \times 5^{32}$ in scientific notation, without the use of a calculator. (3)

[9]

QUESTION 6

6.1 Consider the following expression: $\frac{3x^7}{2x^4} + 4x^3 - x + 7$.

6.1.1 How many terms are in the expression? (1)

6.1.2 What is the coefficient of x? (1)

6.1.3 Write down the constant term. (1)

6.2 Simplify the following algebraic expression: (4)

$4x\left(\sqrt{9x^4}\right) - 3x\left(\sqrt[3]{-27x^6}\right)$

6.3 If $a = 2$ and $p = -3$, determine the value of : $-2a^2 - p$ (2)

[9]

QUESTION 7

7.1 Solve the following algebraic equations.

7.1.1 $4(x+5) = 2(x-3)$ (3)

7.1.2 $\frac{-x}{9} = -2$ (2)

7.2 John spends R*x* at the shop. His sister spends double the amount John spends at the shop. If they spend a total of R420 altogether at the shop, what is the exact amount of money John spent at the shop? (3)

[8]

TOTAL: 60

END OF TEST

ADDITIONAL SPACE