

The Ambassadors College, Ota

S.S.S 1

**THIRD TERM
MID-TERM TERM**

**HOLIDAY
ASSIGNMENT**

2025/2026 Academic Session

Name: _____

HOLIDAY ASSIGNMENT

SSS1 REGULAR MATHEMATICS

1. Copy and complete the table of values for the relation $y = 2x^2 - 7x - 9$ for $-3 \leq x \leq 6$.

x	-3	-2	-1	0	1	2	3	4	5	6
y		13		-9	-14					21

- a. Using scales of 2cm to 1 unit on the x -axis and 2cm to 4 units on the y -axis, draw the graph of $y = 2x^2 - 7x - 9$ for $-3 \leq x \leq 6$.
- b. Use your graph to find the (i) roots of the equation $y = 2x^2 - 7x = 26$
(ii) coordinates of the minimum point of y .
2. Z varies inversely as V . If Z increases by 5%, find the fractional change in V .

SSS1 HONOURS MATHEMATICS

1. (a) (i) Show that the line $y = 2x + c$ does not intersect the parabola $y = x^2 + x + 5$ when $c < 0.75$.
(ii) Find the exact value of c for which the line is a tangent.
(iii) State the point of tangency.
- (b) If 8 men can complete a project in 15 days working 6 hours per day, how many men are needed to complete the same project in 10 days working 9 hours per day?
2. (a) A binary operation Δ on the set of integers is defined by $a \Delta b = a + b - 3$.
Find:
(i) the identity element
(ii) the inverse of an arbitrary element a .
(iii) Solve $(3 \Delta x) \Delta 5 = 11$.
- (b) Z varies inversely as the square of V . If Z increases by 5%, find the percentage change in V .

SSS1 REGULAR FURTHER MATHEMATICS

1. A binary operation $*$ is defined on the set of real numbers, R , by $a * b = a^3 + b^3$.
Without using calculator, find the value of $(\sqrt{5} + 2\sqrt{3}) * (\sqrt{5} - 2\sqrt{3})$, leaving the answer in surd form.
2. Given that $M: (x, y) \rightarrow (7y, 3x - y)$ and $N: (x, y) \rightarrow (2x - y, 5x + 3y)$ are defined.
(a) Write down the matrices M and N of the linear transformations;
(b) Find the:
(i) linear transformation of matrix N followed by M ;
(ii) image of $P(2, -3)$ under the linear transformation N followed by M ;
(iii) coordinates of the point Q whose image is $Q'(2, 4)$ under the transformation N .

SSS1 HONOURS FURTHER MATHEMATICS

1. A binary operation $*$ is defined on the set of real numbers, R , by $a * b = a^3 + b^3$. Without using calculator, find the value of $(\sqrt{5} + 2\sqrt{3}) * (\sqrt{5} - 2\sqrt{3})$, leaving the answer in surd form.
2. An object of mass $9Kg$ rests on a rough horizontal ground. The coefficient of friction between the floor and the object is 0.60. Calculate the least:
(a) horizontal force P that can just move the object;
(b) force Q inclined at an angle of 40° to the ground required to just move the object.
[Take $g = 10 \text{ ms}^{-2}$]

HOLIDAY ASSIGNMENT

ENGLISH LANGUAGE

SS1 English Language Holiday Assignment

As the senior prefect of your school, write a farewell speech to be delivered at the send-off party of your Mathematics teacher who is leaving the school.

NB: Read Continuous Writing (Speech Writing 1) NOSEC pp206 and 207 for answer format.

PHYSICS HOLIDAY ASSIGNMENT FOR SS1 REGULAR

- 1a. State the principle of moment.
- b. A uniform metre rule is found to balance horizontally at the 48 cm mark. When a body of mass 60 g is suspended at the 6 cm mark, the balance point shifts to the 30 cm mark. Calculate the:
 - (i) Mass of the metre rule;
 - (ii) New balance point from the zero end if the body were moved to the 13 cm mark.
- 2a. What do you understand by the term 'Torque of Couple'
- b. A uniform beam PQ of length 60 cm and weight 20 N is supported at two points C and D such that $|PC| = 10$ cm and $|QD| = 15$ cm. Two forces of 10 N and 15 N act at points P and Q respectively. If the system remains in equilibrium, calculate the reactions at C and D.

CHRISTIAN RELIGIOUS STUDIES (HONOURS)

- 1a. Explain how Moses became the son of Pharaoh's daughter.
- b. State THREE benefit of Moses royal upbringing.

CHRISTIAN RELIGIOUS STUDIES (REGULAR)

- 1a. What is Covenant?
- b. Explain God's Covenant with Abraham.

PHYSICS (HONOURS)

- 1a. Differentiate between Density and Relative Density.
- b. State;
 - i. Archimedes Principle
 - ii. Principle of Floatation
- c. Mention FIVE applications of floatation.

FINANCIAL ACCOUNTING (REGULAR)

1. List and explain FIVE errors that does not affect trial balance.
- 2a. What is Accounting Ratio.
- b. State FOUR uses of accounting ratio.

COMMERCE

1. Explain FIVE reasons for consumer protection, stating in each, ONE relevant law aimed at the enforcement.
2. Outline TWO functions of each of the following;
 - i. Consumer association.
 - ii. Manufacturers association

HOLIDAY ASSIGNMENT

ECONOMICS (REGULAR)

- 1a. Define Demand?
- b. Explain FIVE factors affecting demand.

ECONOMICS (HONOURS)

- 1a. Differentiate between Implicit and Explicit costs
- b. With the aid of diagram explain.
 - i. Total Cost
 - ii. Marginal Cost
 - ii. Variable cost
 - iv. Average Fixed Cost

CHEMISTRY

- 1a. Explain the term Redox Reaction.
- b. Define:
 - i. Oxidizing agent
 - ii. Reducing agent
- c. Differentiate between thermal decomposition and thermal dissociation
- 2a. What is Electrolysis?
- b. Define the following terms:
 - i. Electrolyte
 - ii. Electrode
 - iii. Conductor
- c. Differentiate between electrolytic cell and electrochemical cell.

BIOLOGY

- 1a. Define the term population.
- b. List five biotic and abiotic factors each that affect population growth.
2. What are the effects of food shortage on a population?

FOODS AND NUTRITION/CATERING CRAFT PRACTICES

All S.S.S 1 Students that are offering Foods and Nutrition and Catering Craft Practice should come with their cooking utensils.