

# ***The Ambassadors College, Ota***

**GRADE 8 (Honours)**

**Second Term**

**Holiday Assignment**

**HOLIDAY ASSIGNMENT**

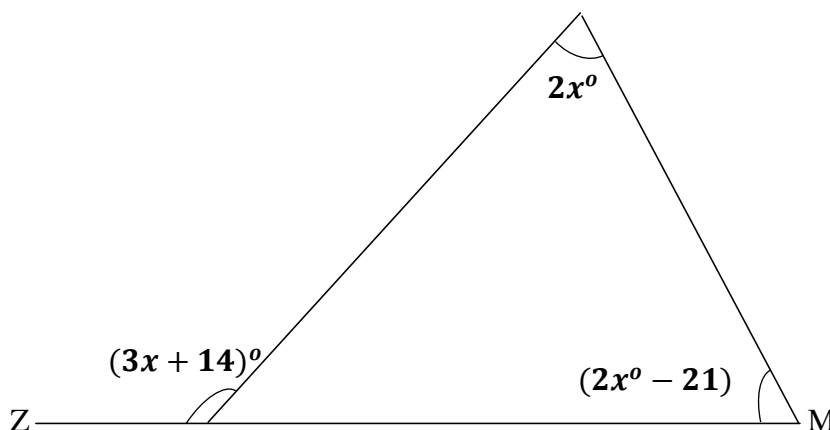
**2023/2024 Academic Session**

**Name:** \_\_\_\_\_

**MATHEMATICS**

1. a. Factorise completely
- i.  $4a^2 - 2bc + 4ac - b^2$
  - ii.  $81x^2 - 49b^2$
- b. Factorise completely, hence find the zeros of the quadratic equations
- i.  $4a^2 + 2a = 12$
  - ii.  $(x - 4)^2 = 9$
  - iii.  $6y^2 = y + 1$

2. a. Simplify  $1.7 \times 10^4 + 6.9 \times 10^2 - 9.73 \times 10^{-1} \div 5 \times 10^{-3}$
- b. In the diagram below, ZM is a straight line. Calculate the value of  $x$



- c. Simplify  $\frac{x^2 + xy}{x^2 - 2xy + y^2}$

**ENGLISH LANGUAGE**

Checkpoint Workbook, Unit 4.

## **BASIC SCIENCE**

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### ***BIOLOGY***

Cambridge Lower Secondary Science Learner's Book 8, Page 153 – 158.  
(Exercise 7.4A – 7.4C).

### ***CHEMISTRY***

Cambridge Lower Secondary Science Learner's Book 8, Page 23 – 24  
(Exercise 2.1C & 2.2A).

### ***PHYSICS***

Cambridge Lower Secondary Science Learner's Book 8, Page 229 – 232,  
(Question 6.1 – 6.14).

## **BASIC TECHNOLOGY**

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1. a. State any three (3) properties of a Trapezoid.  
b. Differentiate between a Concave Polygon and a Convex Polygon.
2. Using general method, construct a hexagon of sides 45mm.
3. State any two (2) differences between a Pump and a Turbine.

## **BUSINESS STUDIES**

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1. What is Office Procedure?
2. State any five (5) importance of office procedure.
3. Differentiate between a store and a warehouse.

**NATIONAL VALUE EDUCATION**

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1. Define Constitution.
2. Explain four (4) types of constitution.
3. State four (4) importance of constitution.