

GREENLAWNS HIGH SCHOOL
FIRST TERMINAL EXAMINATION

STD: 8

MATHEMATICS

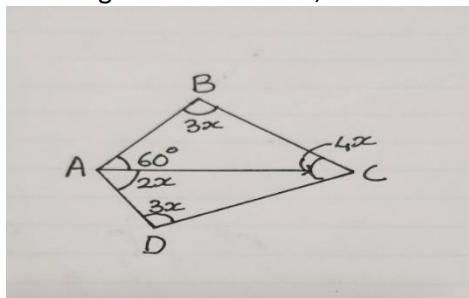
MARKS: ~~60~~ 30

All questions to be answered on composition sheets.

- A. 1. Multiply $2x^2 - 4x + 1$ by $3x - 1$ (3)
 2. Two angles of a quadrilateral are 78° and 120° . If the other two angles are equal find the degree measure of the equal angles. (3)
 3. Draw a number line and mark the following rational numbers on it: (4)
 $\frac{3}{5}$, $\frac{8}{5}$, $\frac{-2}{5}$ and $\frac{-6}{5}$

- B. 1. Factorise $6x^2 + 7x - 5$ (3)
 2. Divide $6x^2 - xy - 35y^2$ by $2x - 5y$ (3)
 3. Find the square root of 5 by division method, correct to two decimal places (4)

- C. 1. Solve for x (3)
 $\frac{4-x}{7} - x = \frac{x-5}{3} + 1$
 2. Using laws of indices, simplify (3)
 $(X^3y^2)^4 \cdot (x^2y^4)^{-2}$
 3. In the figure drawn below, find x and hence find angle ACB. (4)



- D. 1. Factorise $16a^2 - (2a + 3b)^2$ (3)
 2. If $484 = 2^m \times 11^n$, find m and n. (Use prime factorization method.) (3)
 3. Sam's mother is 20 years older than him. Ten years ago she was three times as old as Sam was. Find their present ages. (4)

- E. 1. Answer the following: (3)
 a. What is the degree of the polynomial $4x^4 + 2x^3y^2 + z^2$?
 b. What is the coefficient of x^2 in $4x^2y^3z$?
 c. What is the product of $3x^2y$ and $6x^3y^4z$?
 2. Evaluate using the laws of indices: $(a^2)^3 \times a^4 \div (a^2)^5$ (3)
 3. Simplify: $2\frac{3}{5} + \frac{3}{5}$ of $\frac{2}{5} - \frac{1}{2}$ of $\frac{3}{4} \div \frac{3}{8}$ (4)

- F. 1. Find the cube root of $\frac{-5832}{1331}$ (3)
 2. The sum of the interior angles of a polygon is 1440° . How many sides does this polygon have? Show working. (3)
 3. Simplify: $2a[8b \div 4 - \{4a - (2a + 3b)\}]$ (4)

