

LAVINGTON GIRLS SECONDARY SCHOOL

Holiday assignment

Essential Mathematics

Name.....Adm no.estream

1. Grade 10 learners made a chart showing the laws of indices.

(a) Express the following in index form

(i) 81

(ii) 625

(iii) 128

(b) Simplify the following using laws of indices

(i) 81×3^2

(ii) $b^n \times b^m$

(iii) $(7^2)^3 \div 49$

(iv) $(5 \times 7)^0 + 7^2$

2. Agness bought x kg of rice each at sh. a per kilogram, y kg of yellow beans at sh. b per kilogram. If she paid using Ksh. 1000 note. Write an algebraic expression for the change she received from the seller.

3. A group of people decided to raise Sh. 500,000 for a farming project. Before the project began, 5 members left the group. By letting the original group members be x , Write an algebraic expression for the amount of money each of the remaining members contributed.

4. Aisha is twice as old as John, Juma is 5 years older than Aisha. Ndinda is 3 years younger than John. By letting John's age be y . Write an algebraic expression for sum of their ages.

5. Giving reasons classify the following numbers as either prime or composite

| Number | Prime or composite | Reason |
|--------|--------------------|--------|
| 32 | | |
| 17 | | |
| 21 | | |
| 49 | | |
| 37 | | |