

AHMES SECONDARY SCHOOL PRE
FORM ONE HOLIDAY PACKAGE
MATHEMATICS

1. Given that $p = 13.56$, $q = 17.005$ and $r = 9.58$. By rounding each of the numbers above correct to significant figure, calculate the value of M if $M = \frac{pq}{r}$.
2. (a) If $a : b = 2 : 3$ and $b : c = 5 : 6$. Find $a : b : c$
(b) Find the value of x if $5x : 3 = x + 2 : 3$
3. A man sold his car at 1,200,000/= and made a loss of 30% Find the buying price.
4. Find the difference between LCM and GCF of 21,35 and 56.
5. Evaluate $(\frac{2}{5} + \frac{3}{10}) \times \frac{4}{15} \div \frac{1}{3}$
6. Express 0.08 in the form of $\frac{a}{b}$ where a and b are integers and $b \neq 0$
7. Express 0.96 in the form of $\frac{a}{b}$ in its simplest form then evaluate
 - i. $a + b$
 - ii. $b - a$
 - iii. ab
8. The total mass of cotton harvested in Kwimba district was 17,452.225 kg. Round off this number to the nearest
 - i. Hundreds
 - ii. Hundredths
9. (a) Convert 2.53 into improper fraction.
(b) Estimate the value of 4.1×0.082
10. The age of Derick is $\frac{1}{8}$ the age of his father. If the sum of their ages is 63 years. Find their ages.
11. Find the smallest number of sweet that can be put into bags with either contain 9, 15 or 20 sweets with none left over.
12. Express 0.05473
 - i. Correct to three (3) significant figures.
 - ii. Correct to three (3) decimal places.
 - iii. In standard form

13. The ratio of men: women: children living in Muza village is 6:7:3. If there are 42,000 women, find how many:
- Children live in Mkuza village
 - People altogether
14. Express 0.105 in the form of $\frac{a}{b}$ where a and b are integers and $b \neq 0$
15. The price of TV set which includes V.A.T is Tshs 140,800/= if the rate of V.A.T is 30%, Find the price of the TV before V.A.T was added
16. Change 0.103 into fraction
17. The numbers 28,41,42,59 and 70 belong to the set of natural numbers using these numbers: Calculate the difference between the Least common multiple (LCM) of the prime numbers and the Greatest common factor (GCF) of the remaining numbers.
18. Rearrange the order of the digits in the number 5879613 to make it
- the largest possible number
 - the smallest possible number
19. Mary was given 60,000 shillings by her mother. She spent 35% of the money to buy shoes and 10% of the remaining money to buy books. How much money remained?
20. Mr. Ngassa set an examination weighing a total of 96 marks with the following distribution: 20% of the marks were awarded for reading, 40% for writing, 15% for practical and the remaining percentage for spelling. Find the marks that were awarded for spelling.
21. Three airplanes arrived at Kilimanjaro International Airport (KIA) at the interval of 30 minutes, 40 minutes and 60 minutes. If all three airplanes arrived at KIA at 2:00 p.m. On Saturday, when and at what time would they arrived together again?
22. By selling a juice at 700/= a shopkeeper makes a profit of 40%. what will be the percentage loss if the juice could be sold at 425/=
23. Find the LCM and GCF of all prime numbers between 25 and 32.
24. Write the number 7.01459 correct to
- Three decimal places
 - Five significant figures