**FORM THREE APRIL HOLIDAY ASSIGNMENT**

1. Simplify $\frac{√11}{\sqrt{11}-√7} $ (3mks)
2. Find the value of x in following log x3-log5x=5log2-log$\frac{2}{3}$ (4mks)
3. Solve the following equation $\frac{x+3}{24}=\frac{1}{x-2}$ (3mks)
4. Find the values of x and y in x+y=17(4mks)

 Xy-5x=32

1. Determine the percentage error in calculating the surface area of a spherical; ball of radius decimal places(4mks)
2. A triangle ABC is such 7cm correct to 2
3. that AB=5cm,BC=6cm and angle ABC =1000.Calculate ;
4. Line AC (3mrks)
5. the diameter of the circumcircle (3mrks)
6. Given that sinα=$\frac{2}{3}$ and αis anα acute angle Find tanα and cos α (3mrks)
7. Kambo bought a piece of land at sh.280000.it appreciated to sh.495000 after 4 years .Determine the rate of appreciation per annum correct to 2 decimal places(4mrks)
8. Mbaka bought some plots at sh.400000.the value appreciated at 10% per annum .
9. calculate its value after two years(3mrks)
10. After some times the value of the plot appreciated tosh.558400.find the time to the nearest month.(4mrks)
11. Mbaka sold all the plots he had bought at sh. 2298200 after four years . Fiind the % profit he made.(3mrks)
12. Mr Akeno earns a basic salary of sh.20000and provided with a house at a nominal rent of sh.700per month .Using the table below ,calculate ;

|  |  |
| --- | --- |
| Monthly taxable pay  | Rate of tax in sh per k£ |
| 1-342 | 2 |
| 343-684 | 3 |
| 685-1026 | 4 |
| 1027-1368 | 5 |
| 1369-1710 | 6 |
| Over 1710 | 7 |

1. Taxable pay per month in K€(3mrks)
2. Total tax payable(4mrks)
3. Net tax if he gets a tax relief of sh 600 per month(3mrks)