**GATITU MIX3D SECONDARY SCHOOL**

**MATHS FORM ONE END OF TERM 2 2015**

1. List the prime numbers between **640** and **650** (3 marks)

2. Which of the following numbers are divisible by 9? (3 marks)

**405, 5346 and 8432**

3. Three similar steel bars of length **200cm, 300cm and 360cm** are cut into equal pieces. Find the largest possible area of a square which can be made from any of the three pieces. (3 marks)

4. Three bells ring at intervals of **40 minutes, 45minutes and 60 minute**. If they ring simultaneously at 6.30 a.m. at what time will they next ring together? (3 marks)

5. Perform the following operations and represent it on a number line. (4 marks)

 a) **(-6)+(+4)+(-8)**

b) **(-7)+(+2)**

c) **(-5)+(-5)+(-5)**

d) **(-15)+(+12)**

6. Rhoda walked four floors down from the tenth floor and then took a lift to the eighteenth floor. How many floors did she go through while in the lift? (3 marks)

7. Arrange the following fractions in ascending order (4 marks)

 **5/12, 7/3, 11/5, 9/4**

8. Find the value of the unknown in :

a) **3p/5 =36/15p**

 b**)9/2t=18/28**

9. Work out: (3marks)

 **52/3 +14/5 -21/3**

10. It takes **11/2**days to make a toy train. How many such toys can be made in two weeks? (3 Mks)

11. Evaluate:

 **½ {3/5+1/4(7/3-3/7) of 11/2 ÷5}** (3 marks)

12. An integer p is two thirds of another and their difference is 10. Find the two integers. (3 marks)

13. Express the following as fraction:

 **3. 256**

14. The periodic time for swing of a swing of a pendulum in seconds is given by the formula.T=**2π** (squre root l/g.Calculate the value of T when l=**23.7cm** and g=1000cms-2 (3 marks)

15. Express the following as a single fraction in its lowest form: (3 marks)

**2r+t/t + r+1/r**

16. An alloy is to be made by combining copper and alluminium in the ratio 3:8.If there is 39kg of copper, how much of aluminium is required to make the alloy? (3 marks)

 ALL THE BEST.MR KAMAU.