**GATITU MIXED SECONDARY SCHOOL**

**MATHEMATICS FORM 2 TUNE UP C.A.T 1 2ND TERM 2013**

1. Evaluate ab -ba if a = 2 b = -2 (3mks)

**bb × aa**

1. **Given that y =ax? find the value of y when a =5/3 x =2 n= - 4 (2mks)**
2. **Given that the triangle ABC and PQR in the figure below one similar, find , (6mks)**

**a. the size of< QPR**

**b. the lengths of PQ and PR**

1. **Find the height of an isosceles triangle if the equal sides one each 26 cm and the base is 48 cm long (2mks)**
2. **Given that cos x = sin ( 3x + 10) find x (2mks)**
3. **Find the value of the unknown lengths (4mks)**
4. **Read from tables the**

**a. tangent of 480421 (2mks)**

**b. sine of 770341 (2mks)**

**c. cosine of 24.230 (1mk)**

1. **Simplify without using tables (use trigonometric ratios)**

**sin 600 cos 300 + sin 300 cos 600 (2mks)**

1. **Given that sin A= 4/5 , cos B =5/13 and A and B are acute angles, without using tables calculate Sin B cos A + sin A tan B (3mks)**
2. **Use trigonometric ratio to find (2mks)**

**tan 450 + cos 450sin 450**

**MR KARANJA**