NAME ………………………………………………. ………… DATE……………

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| **KISIRIRI SECONDARY SCHOOL** |
| P.O. BOX 93 -20500 NAROK. TEL. 0721451691  ***MATHEMATICS INTERVIEW FOR FORM THREE***  **40MIN** |

1. Solve the equation. (3mks)

**x + 1 2x + 1** = 9

**+**

**2 3**

3. Use the substitution method to solve for x and y in the simultaneous equations below.(3mks)

4x - 3y = 1

X – 4 = 2y

4. Without using logarithm tables or a calculator, evaluate, giving the answer in decimal form. (3mks)

**0.015 + 0. 45 ÷1.5**

**4.9 x O.2 + 0.07**

5. The size of an interior angle of a regular polygon is 156o. Find the number of sides of the Polygon. (2mks)

6. The coordinates of the line AB are A (4, 6) and B (12, 10). Find the equation of a perpendicular line to line AB, passing through the mid-point of the line AB (3mks)

7. Find the area of regular hexagon of side 4.8cm (3mks)

8. In this question, calculator may be used.

A Kenyan bank buys and sells foreign currencies as shown below

Buying Selling

(In Kenya shillings) In Kenya Shillings

1 Hong Kong dollar 9.74 9.77

1 South African rand 12.03 12.11

A tourists arrived in Kenya with 105 000 Hong Kong dollars and changed the whole amount to Kenyan shillings. While in Kenya, she spent Kshs 403 897 and changed the balance to South African rand before leaving for South Africa. Calculate the amount, in South African rand that she received. (3mks)

9. The diagram **below** represents a field PQR. Find angle Q. (4mk)

6cm

P

Q

R

7cm

5cm

10. Find the equation of the line passing through (1,-2) and is parallel to the line 2y -3x + 4 = 0. Express your answer in the form ay + ax + c = 0 ( 3mks)

11. The volume of water is measuring cylinder reads 200cm3. When a cube is immersed into the water, the cylinder reads 543cm3. Find

a) the volume of the cube ( 1 mk)

b) The length of the side of the cube (2mks)