1. Add: 431 + 569.
2. List all the elements in set B complement.

A B

a c d

b e

f

1. How many centimeters are equivalent to 0.04km?
2. Find the square of 1
3. Express 250gm as a percentage of 2kg.
4. Solve for m: 2m – 1 = 5 (mod 6)
5. Write “Two thousand, nine hundred forty-nine” in Hindu Arabic numerals.

1. Solve for y in degrees.

y

110**0** 105**0**

1. Workout 3. 3 x 125 – 3.3 x 25 using distributive methods.
2. Betty covered 140km in 105 minutes. Express her speed in kilometers per

hour.

1. If a = -3, c = -4 and b = , evaluate ac ÷ (b)
2. Without using a compass, draw an angle of 450 in the space below.

1. Simplify: 36a**2**b

9ab**2**

1. The sum of two numbers is 2. If one of the numbers is , what is the

Other number?

1. Solve for P and write the solution set for:- 3P + 2 > P + 6.
2. Change 72 to binary base.
3. If  = , find the value of k.
4. A and B are sets. Draw a venn diagram to represent the relation: AB = A

1. Expand the number shown on the abacus below using powers of ten.

H T O

1. It is a quarter past twelve o’clock in the afternoon. Write that time in

twenty four hour clock system.

**SECTION B (60 MARKS)**

1. Below is an Isosceles triangle

C a) Find the value of m. (2marks)

**4m (m+30)0**

**A B**

b) Find the size of angle ACB (2marks)

1. a) Workout 3 x -4 using a number line. (2marks)

b) Express 0.0078 into scientific notation. (1mark)

c) Mrs. Ntambi is twice as old as her daughter. If their total age is 75

years, how old is her daughter? (2marks)

1. Town A is 650 metres away from Town B on a bearing of 120**0** and Town B is 500 metres East of Town C.

a) Show the above information a well drawn labeled sketch (1mark)

b) Using a scale drawing of 1cm to represent 100m, draw an accurate diagram

to show the positions of the three towns. (4marks)

c) From the accurate diagram, find the true bearing of town A from town C.

(1mark)

1. a) Solve: y + 3 = 5y + 1 (3marks)

3 9

b) 5 – 2( k + 1) = 0 (2marks)

1. a) With the aid of a pencil, ruler and pair of compasses, construct a triangle PQR where angle P = 60**0**, angle R = 45**0** and line PR = 5cm.

Drop a perpendicular line from point Q to meet line PR at O. (5 marks)

b) Measure angle RQO (1mark)

1. A vehicle can cover 140km using 18 litres of fuel
2. How far can the same vehicle go using one litre of fuel? (2marks)

1. If a litre of fuel costs shs. 3600, how much will be spent on a journey of 320km long? (3marks)
2. A Primary Seven boy rolled a bicycle wheel of radius 28cm along a path as shown below.

28cm

528metres

1. Taking P. as , how many centimeters did the wheel move in one rotation?

(2marks)

1. Find the maximum number of revolutions made by the wheel through the entire path. (3marks)
2. a) A tank contains 6000 litres of water. A tap is opened and releases water at a rate of 20 litres per minute. How long will it take for the tank to become completely empty. (3marks)

b) In an hour, a watch loses 5 seconds, in how many hours will it lose 2

minutes? (2marks)

1. a) By selling a radio at sh. 180,000, Ronald made a loss of 10%. Calculate the market price of the radio. (2marks)

b) Today is Wednesday, what day of the week was it 75 days ago? (2marks)

1. a) Find the value of the unknown base P. 1001 two = 21 P (2marks)
2. A tank is  full of water, when 2500 litres is added, it becomes full. How many litres of water does it hold when it is  full of water? (3marks)
3. a. Solve : 4 (2x – 3) – 2 (k + 5) = 2 (2marks)

b) What must be added to 2n + 5 to get 3n+2? (3marks)

1. The pie chart below shows how the school bursar bought various items

from the school shop.

Ink a) Find the value of m (3marks)

m Rubbers

Books

130**0**

110**0**

Pens

b) If he spent sh. 72,000 more on books than on pens, how much money in

total did he spend on all items? (3marks)

**END**