FORM 1 MATHEMATICS MARKING SCHEME

1. What is the place value of total value of digit 6 underlined below..　　　(3mks)
   47,397,263,402

   Ten thousands
   t.v= p.v x N
   10000 x 6
   =60,000

2. Round off the following numbers to the nearest number indicated in the brackets.　　(3mks)
   a) 473,678(100)
   473700

   b) 379(10)
   380
   c) 38,679(10,000)
   　40,000
3. Write the following in symbols.　　　(2mks)
   a) Five billion, five million, five thousand and five.
   5,005,005,005

   b) Write the following in words 80,000,045, 000　　　(2mks)
   　Eighty billion, forty five thousand

4. Express the following numbers as a product of their prime factors.
   a) 900　　　(2mks)
   = 2^2 x3^2x5^2

   b) 300　　　(2mks)
   2^2 x 3x 5^2

   c) 196　　　(2mks

2		
2	98	**2x2x7x7**
7	49	**2^2x7**
7	7	
7	1	

   d) 64　　　(2mks)

   2x2x2x2x2

   =2^5

5. Use the number line to perform the following.
   a) (+5) – (-2)　　　(2mks)
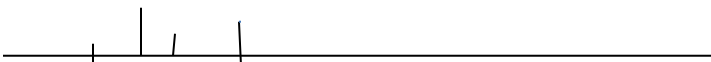
b) (+2) + (+3) (2mks)

c) -7- (-8) (2mks)

6. The G.C.D of two numbers is 12 and their L.C.M is 240. If one of the numbers is 60. Find the other number. (3mks)

$$N = GC.D \times L.C.M \quad \underline{12 \times 240 \quad 48}$$
$$60$$

7. If x=-2, 7=-6 and Z=4. Find the values of
   (a) $\underline{4xy}$ (3mks)
   z

$$\underline{4x - 2x-6} = 48 = 12$$
$$4 \quad 4$$

(b) 4z+2y-x (3mks)
4x4+(2x-6)-(-2)
16+(-12) – (-2)
16-12+2=6

8. Three tanks are capable of holding 36, 84 and 90 Litres of milk. Determine the capacity of the greatest vessel which can be used to fill each one of them on exact number of times. (3mks)

3	36	84	90	
2	12	28	30	
	6	14	15	**3x2=6litres**

9. Test whether the following numbers are divisible by 3. (4mks)
a) 1257
   1+2+5+7=15 divisible by 3

b) 7203
   7+2+0+3=12 divisible by 2

10. Three bells ring at intervals of 40 minutes, 45 minutes and 60 minutes. If they ring simultaneous at 6.30 a.m. at what time will they next ring together. (4mks)

2	40	45	60	$2^3 \times 3^2 \times 5$
2	20	45	30	
2	10	45	15	360min
3	5	45	15	1hr=6cm
3	5	15	15	
5	1	1	1	360=6hrs
				60 6hrs

6.30

+6

12.30p.m

11. A bookstore had 30816 exercise books which were packed in cartons. Each carton contained 24 exercise books. The mass of an empty carton was 2kg and a full carton 12kg.

a) How many cartons were there (2mks)

I CARTON= 24bks
30816
30816/24=1284 cartons

b) What was the total mass of the empty cartons. (2mks)

1284 x 2568kg

c) What was the total mass of books alone? (2mks)

24bks=10kg
30816=?
30816 x 10=12840kg
**   24**