Part 1
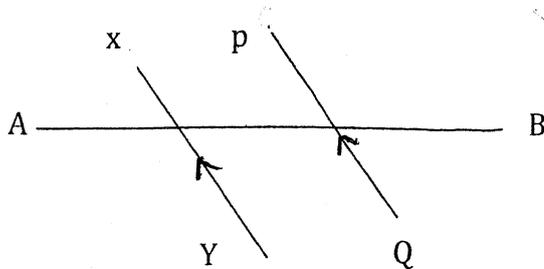
1) Answer all the questions

1. Find the digital root of 1436,

2. Write 81 in index notation with 3 as the base.

3. Simplify $20 \div (3+2)$

4. Find the LCM of 36 and 48

5. Find the value of $(-12) + (+7)$

6. Draw the angle $A\hat{B}C = 50^0$

7. Draw a figure with only one axis of symmetry.

8. The number $17\square2$ is divisible by 6. Find the largest digit suitable for the empty space.

9. Find the value of $3^2 \times 2^3$

10. According to the given figure name a pair of parallel lines.

Part II

Answer all the questions

1. A={Prime numbers between 2 and 10}

   i.   Write down the set A by writing its elements within curly brackets.

   ii. Represent the set A by a Venn diagram.

   iii. B={3,6,9,12,15,18} Write down the set B in terms of a common property of its elements.

   iv. Express 12 as a product of two factors.

   v.   {all the factors of 12} write the elements of the set within curly brackets.

2) Simplify
   i. $5 \times 4+9$

   ii. $30 \div 6 \times 12$

   iii. Express 100 as a product of its prime factors.

   iv. Write down the number 100 as a product of powers with prime numbers as basses.

3) .

    i.   Find the value of a^3b^2 when a=2 b=3 .

    ii.   Find the value of (+3) + (-1) using the number line.

    iii.   Draw a straight line segment AB such that AB=5cm.

    iv.   Name two locations where parallel lines can be observed in your day to day life.

    v.   Write two instruments that you used to draw parallel lines in the classroom.

4) .

    a.

Years	Months	Days
2	5	17
+3	9	29

    b. How many months are there in 2 years?

    c. Write down the decade and the century to which each one of the following years belongs

Year	decade	Century
2018		
2100		

    d. Choose the leap years from the years given below.
        i.   A 2020
        ii.   AD2300
        iii.   AD1800

    e. Indicate 320 days in months and days