L.C.M

1. a) Find the greatest common divisor of the term. (1 mark)

   \[ 144x^3y^2 \text{ and } 81xy^4 \]

   b) Hence factorise completely this expression \(144x^3y^2 - 81xy^4\) (2 marks)

2. The GCD of two numbers is 7 and their LCM is 140. If one of the numbers is 20, find the other number (2 mks)

3. The LCM of three numbers is 7920 and their GCD is 12. Two of the numbers are 48 and 264. Using factor notation find the third number if one of its factors is 9. (3 mks)

4. Find the least number of sweets that can be packed into polythene bags which contain either 9 or 15 or 20 or 24 sweets with none left over. (3 mks)

5. A number \(n\) is such that when it is divided by 27, 30, or 45, the remainder is always 3. Find the smallest value of \(n\). (2 mks)

6. A piece of land is to be divided into 20 acres or 24 acres or 28 acres for farming and leave 7 acres for grazing. Determine the smallest size of such land.

7. When a certain number \(x\) is divided by 30, 45 or 54, there is always a remainder of 21. Find the least value of the number \(x\)

8. A number \(m\) is such that when it is divided by 30, 36, and 45, the remainder is always 7. Find the smallest possible value of \(m\).

9. Find the L.C.M of \(x^2 + x\), \(x^2 - 1\) and \(x^2 - x\)