## L.C.M

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

$$
144 x^{3} y^{2} \text { and } 81 x y^{4}
$$

b) Hence factorise completely this expression $144 x^{3} y^{2}-81 x y^{4}$
2. The GCD of two numbers is 7and their LCM is 140 . if one of the numbers is 20 , find the other number
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 .
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.
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 .
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 $\boldsymbol{x}$ is divided by 30,45 or 54 , there is always a remainder of 21 . Find the least value of the number $\boldsymbol{x}$
8. A number $\mathbf{m}$ is such that when it is divided by 30,36 , and 45 , the remainder is always 7 . Find the smallest possible value of $\mathbf{m}$.
9. Find the L.C.M of $x^{2}+x, x^{2}-1$ and $x^{2}-x$

