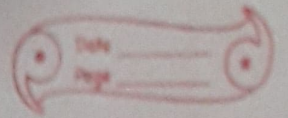


Hw
28-06-2021



8. Find the smallest number which, on being decreased by 3, is completely divisible by ~~12, 18, 24~~, 18, 36, 32, 27.

$$\begin{array}{r} 2 \overline{) 18, 36, 32, 27} \\ 2 \overline{) 9, 18, 16, 27} \\ 3 \overline{) 9, 9, 8, 27} \\ 3 \overline{) 3, 3, 8, 9} \\ 1, 1, 8, 3 \end{array}$$

$$\begin{aligned} \therefore \text{LCM} &= 2 \times 2 \times 3 \times 3 \times 1 \times 1 \times 8 \times 3 \\ &= 864 \end{aligned}$$

$$\begin{array}{r} 36 \text{ (1)} \\ \times 8 \text{ (1)} \\ \hline 288 \\ \times 3 \text{ (2)} \\ \hline 864 \\ + 3 \\ \hline \hline 867 \end{array}$$