

1. READ EACH OF THE FOLLOWING PROBLEM CAREFULLY & GUESS WHETHER YOU WILL FIND OUT HCF OR LCM TO FIND THEIR SOLUTION?

(i) A shopkeeper sells candles in packets of 12 and candle stands in packet of 8. What is the least number of candles and candle stands Azwah should buy so that there will be one candle for each candle stand. HCF / LCM

(ii) Find the lowest number which is exactly divisible by 18 and 24. HCF / LCM

(iii) A certain number of students can be arranged in groups of 3, 4, 6 or 8 with no student left behind. Find the least possible number of students which can be arranged in such groups. HCF / LCM

(iv) The local bus service has 2 lines of buses that start together at 8 a.m. Buses on line A leave after every 15 minutes while Buses on line B leave after every 20 minutes. In a day, how many times do buses on both line A and B leave together between 8 a.m. and 11 a.m. HCF / LCM

(v) Shayan wants to plant 28 rose plants and 36 jasmine plants in his garden. What is the greatest possible number of rows if each row has the same number of jasmine plants and the same number of rose plants & number of plants in each row is same. HCF / LCM

(vi) Ayesha is thinking of a number which is divisible by 17 & 6 both, what is the smallest possible number she is thinking off? HCF / LCM

(vii) Ali goes for hiking every 10 days & swimming every 6 day, If he did both exercises today .How many days from now he will go both hiking & swimming again? HCF / LCM

(viii) Boxes that are 12 inches tall are being stacked next to boxes that are 18 inches tall. What is the shortest height at which the two stacks will be the same height? HCF / LCM

2. Ali wants to do tiling on rectangular floor of dimensions 18ft by 15ft with square tiles . What could be the largest possible length of each square tile?

(Rayyan's was asked to solve above word problem, which of the following could be his solution .

Length of each square tile:
LCM of 18 & 15

$$\begin{array}{r|rr} 3 & 18 & 15 \\ \hline & 6 & 5 \end{array}$$

$LCM = 3 \times 6 \times 5 = 90$
Length of each tile is 90ft.

Option : 1

Length of each square tile:
HCF of 18 & 15

$$\begin{array}{r|rr} 3 & 18 & 15 \\ \hline & 6 & 5 \end{array}$$

$HCF = 3$
Length of each tile is 3ft.

Option : 2