

LCM and HCF

LCM: Lowest Common Multiple. Least Number which is exactly divisible by the given numbers.

HCF: Highest Common Factors. Greatest number which can divide the given numbers exactly.

(LCM and HCF can be found by prime factorisation and division method)
E.g. Find the LCM and HCF of the following numbers. 36 and 48

Prime Factorisation Method	Division Method
36= $2 \times 2 \times 3 \times 3$ 48= $2 \times 2 \times 2 \times 2 \times 3$ HCF= common factors = $2 \times 2 \times 3$ = 12 LCM= common factors x rest factors = $2 \times 2 \times 3 \times 3 \times 2 \times 2$ = 144	$\begin{array}{r l} 2 & 36, 48 \\ \hline 2 & 18, 24 \\ \hline 3 & 9, 12 \\ \hline & 3, 4 \end{array}$ HCF= common factors = $2 \times 2 \times 3$ = 12 LCM= $2 \times 2 \times 3 \times 3 \times 4 = 144$

Exercise 2

Find the LCM and HCF of the following numbers.

1. 36 and 24

LCM: _____

HCF: _____

3. 42 and 56

LCM: _____

HCF: _____

2. 40 and 48

LCM: _____

HCF: _____

4. 60 and 72

LCM: _____

HCF: _____

5. 80 and 84

LCM: _____

HCF: _____

6. 72 and 160

LCM: _____

HCF: _____

7. 96 and 72

LCM: _____

HCF: _____

8. 180 and 200

LCM: _____

HCF: _____

9. 39 and 56

LCM: _____

HCF: _____

10. 11 and 13

LCM: _____

HCF: _____

Find the LCM of the following numbers.

11. 96 and 72

LCM: _____

12. 108 and 34

LCM: _____

13. 120 and 48

LCM: _____

14. 39 and 56

LCM: _____

15. 126 and 84

LCM: _____

16. 80 and 92

LCM: _____

Find the HCF of the following numbers.

17. 130 and 50

HCF: _____

18. 30 and 62

HCF: _____

19. 240 and 210

HCF: _____

20. 90 and 54

HCF: _____