

1. LCM & HCF

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HCF \rightarrow Highest common factor
LCM \rightarrow Least common multiple

✓ LCM \rightarrow Least common multiple.

HCF

1) Factorization Method

2) Division Method.

ex: $2^2 \times 3^2 \times 5 \times 7^1$, $2^2 \times 3^5 \times 5^2 \times 7^0$, $2^3 \times 3^3 \times 7^2$

HCF $\Rightarrow 2^2 \times 5 \times 7^1 = 4 \times 5 \times 7 = 96$

ex: 108, 288, 360

2	108
2	54
3	27
3	9
3	3
3	1

2	288
2	144
2	72
2	36
2	18
2	9
3	3
3	1

360
$2^3 \times 3^2 \times 5$

$$\frac{3}{1}$$

$$2^2 \times 3^3$$

$$\frac{1}{1}$$

$$2^5 \times 3^2$$

$$2^3 \times 3^5 \times 5$$

$$2^2 \times 3^2 = 4 \times 9 = 36,$$