

Prime factorization of 24 using continuous division:

$$\begin{array}{r|l} 2 & 24 \\ 2 & 12 \\ 2 & 6 \\ \hline & 3 \end{array}$$

Thus, the prime factorization of 24 is $2^3 \times 3$.

Find the GCF of 12 and 16 using continuous division:

$$\begin{array}{r|ll} 2 & 12 & 16 \\ 2 & 6 & 8 \\ \hline & 3 & 4 \end{array}$$

Thus, the GCF of 12 and 16 is $2 \times 2 = 4$.

Find the GCF of 4, 6 and 16 using continuous division:

$$\begin{array}{r|lll} 2 & 4 & 6 & 16 \\ \hline & 2 & 3 & 8 \end{array}$$

Thus, the GCF of 4, 6 and 16 is 2.

Find the LCM of 4, 6 and 16 using continuous division:

$$\begin{array}{r|lll} 2 & 4 & 6 & 16 \\ 2 & 2 & 3 & 8 \\ \hline & 1 & 3 & 4 \end{array}$$

Thus, the LCM of 4, 6, 16 is $2^2 \times 3 \times 4 = 48$.

Find the LCM of 2, 3 and 6 using continuous division:

$$\begin{array}{r|lll} 2 & 2 & 3 & 6 \\ 3 & 1 & 3 & 3 \\ \hline & 1 & 1 & 1 \end{array}$$

Thus, the LCM of 2, 3, 6 is $2 \times 3 = 6$.