

j) 9 and 12

Multiples of 9 = 9, 18, 27, 36

Multiples of 12 = 12, 24, 36

Qw
2.4.21

$$\begin{array}{r|l}
 2 & 16 \\
 \hline
 2 & 8 \\
 \hline
 2 & 4 \\
 \hline
 2 & 2
 \end{array}
 \qquad
 \begin{array}{r|l}
 2 & 48 \\
 \hline
 2 & 24 \\
 \hline
 2 & 12 \\
 \hline
 2 & 6 \\
 \hline
 3 & 2
 \end{array}$$

$$\begin{array}{l}
 16 = 2 \times 2 \times 2 \times 2 \\
 48 = 2 \times 2 \times 2 \times 2 \times 3
 \end{array}
 \qquad
 \begin{array}{l}
 \text{LCM} \\
 2 \times 2 \times 2 \times 2 \times 3 = 48 \\
 =
 \end{array}$$

$$\begin{array}{r|l}
 2 & 8 \\
 \hline
 2 & 4 \\
 \hline
 2 & 2 \\
 \hline
 1 & 1
 \end{array}
 \qquad
 \begin{array}{r|l}
 2 & 12 \\
 \hline
 2 & 6 \\
 \hline
 3 & 3 \\
 \hline
 1 & 1
 \end{array}
 \qquad
 \begin{array}{r|l}
 2 & 16 \\
 \hline
 2 & 8 \\
 \hline
 2 & 4 \\
 \hline
 2 & 2 \\
 \hline
 1 & 1
 \end{array}
 \qquad
 \begin{array}{l}
 8 = 2 \times 2 \times 2 \\
 12 = 2 \times 2 \times 3 \\
 16 = 2 \times 2 \times 2 \times 2
 \end{array}$$

$$\begin{array}{l}
 \text{LCM} \\
 2 \times 2 \times 2 \times 2 \times 3 = 48 \\
 =
 \end{array}$$

$$\begin{array}{r} 2 \overline{) 20} \\ 2 \overline{) 10} \\ \underline{\quad} \\ 5 \end{array} \quad \begin{array}{r} 5 \overline{) 25} \\ 5 \overline{) 15} \\ \underline{\quad} \\ 5 \end{array}$$

$$20 = 2 \times 2 \times 5$$

$$c) \begin{array}{r} 2 \overline{) 20} \\ 2 \overline{) 10} \\ \underline{\quad} \\ 5 \end{array} \quad \begin{array}{r} 5 \overline{) 25} \\ \underline{\quad} \\ 5 \end{array}$$

$$20 = 2 \times 2 \times 5$$

$$25 = 5 \times 5 \quad 2 \times 2 \times 5 \times 5 = \underline{\underline{100}} \quad \text{LCM}$$

$$d) \begin{array}{r} 2 \overline{) 40} \\ 2 \overline{) 20} \\ 2 \overline{) 10} \\ \underline{\quad} \\ 5 \end{array} \quad \begin{array}{r} 2 \overline{) 50} \\ 5 \overline{) 25} \\ \underline{\quad} \\ 5 \end{array}$$

$$40 = 2 \times 2 \times 2 \times 5$$

$$50 = 2 \times 5 \times 5 \quad 2 \times 2 \times 2 \times 5 \times 5 = \underline{\underline{200}} \quad \text{LCM}$$

$$\begin{array}{r|l}
 2 & 56 \\
 \hline
 2 & 28 \\
 \hline
 2 & 14 \\
 \hline
 & 7 \\
 \hline
 & \\
 \hline
 & 7
 \end{array}
 \qquad
 \begin{array}{r|l}
 2 & 64 \\
 \hline
 2 & 32 \\
 \hline
 2 & 16 \\
 \hline
 2 & 8 \\
 \hline
 2 & 4 \\
 \hline
 & 2 \\
 \hline
 & \\
 \hline
 & 2
 \end{array}$$

$$56 = 2 \times 2 \times 2 \times 7$$

$$LCM = 2 \times 2 \times 2 \times 7 \times 2 \times 2 \times 2 = \underline{\underline{448}}$$

$$64 = 2 \times 2 \times 2 \times 2 \times 2 \times 2$$

$$\begin{array}{r|l}
 2 & 96 \\
 \hline
 2 & 48 \\
 \hline
 2 & 24 \\
 \hline
 2 & 12 \\
 \hline
 2 & 6 \\
 \hline
 & 3 \\
 \hline
 & \\
 \hline
 & 3
 \end{array}
 \qquad
 \begin{array}{r|l}
 2 & 144 \\
 \hline
 2 & 72 \\
 \hline
 2 & 36 \\
 \hline
 2 & 18 \\
 \hline
 3 & 9 \\
 \hline
 & 3 \\
 \hline
 & \\
 \hline
 & 3
 \end{array}$$

$$96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$$

$$144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$$

$$LCM = 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3 = \underline{\underline{288}}$$

$$\begin{array}{r|l} 2 & 36 \\ \hline 2 & 18 \\ \hline 3 & 9 \\ \hline & 3 \end{array} \qquad \begin{array}{r|l} 2 & 42 \\ \hline 3 & 21 \\ \hline & 7 \end{array}$$

$$36 = 2 \times 2 \times 3 \times 3$$

$$42 = 2 \times 3 \times 7$$

$$2 \times 2 \times 3 \times 3 \times 7 = \overset{\text{LCM}}{756} \quad \text{LCM} = \underline{\underline{252}}$$

h) ~~3~~ ~~3~~ $3 \overline{) 21}$ $2 \overline{) 36}$

$$\begin{array}{r} 3 \overline{) 21} \\ \underline{21} \\ 0 \end{array}$$

$$\begin{array}{r} 2 \overline{) 36} \\ \underline{20} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

$$\begin{array}{r} 3 \overline{) 9} \\ \underline{9} \\ 0 \end{array}$$

$21 = 3 \times 7$

$36 = 2 \times 2 \times 3 \times 3$

$3 \times 7 \times 2 \times 2 \times 3 = \del{756} $252 = \text{LCM}$$

i) $3 \overline{) 15}$ $5 \overline{) 45}$

$$\begin{array}{r} 3 \overline{) 15} \\ \underline{15} \\ 0 \end{array}$$

$$\begin{array}{r} 5 \overline{) 45} \\ \underline{45} \\ 0 \end{array}$$

$15 = 3 \times 5$

$3 \times 5 \times 3 = \overset{\text{LCM}}{45}$

$45 = 5 \times 3 \times 3$

j) $2 \overline{) 10}$ $2 \overline{) 20}$ $3 \overline{) 30}$

$$\begin{array}{r} 2 \overline{) 10} \\ \underline{10} \\ 0 \end{array}$$

$$\begin{array}{r} 2 \overline{) 20} \\ \underline{20} \\ 0 \end{array}$$

$$\begin{array}{r} 3 \overline{) 30} \\ \underline{30} \\ 0 \end{array}$$

$10 = 2 \times 5$

$2 \times 5 \times 2 \times 3 \times 5 = \overset{\text{LCM}}{300}$

$20 = 2 \times 2 \times 5$

$30 = 2 \times 3 \times 5$