

Find L.C.M. with the help of multiplication tables -

Q1 a) 3 and 6

Sol -

Multiples of 3 = 3, 6, 9, 12, 15

Multiples of 6 = 6, 12, 18, 24, 30

L.C.M. = 6 Ans.

b) 4 and 8

Sol -

Multiples of 4 = 4, 8, 12, 16, 20

Multiples of 8 = 8, 16, 24, 32, 40

L.C.M. = 8 Ans.

c) 10 and 15

Sol -

Multiples of 10 = 10, 20, 30, 40, 50

Multiples of 15 = 15, 30, 45, 60, 75

L.C.M. = 30

d) 9 and 12

Sol -

Multiples of 9 = 9, 18, 27, 36, 45

Multiples of 12 = 12, 24, 36, 48, 60

L.C.M. = 36 Ans.

Q2 (a) 9, 15

Sol - Multiples of 9 = 9, 18, 27, 36, (45)

Multiples of 15 = 15, 30, (45), 60, 75

L.C.M. = 45 Ans.

(b) 12, 16

Sol -

Multiples of 12 = 12, 24, 36, (48), 60

Multiples of 16 = 16, 32, (48), 64, 80

L.C.M. = 48 Ans.

(c) 18, 24

Sol -

Multiples of 18 = 18, 36, 54, (72), 90

Multiples of 24 = 24, 48, (72), 96, 120

(d) 18, 27

Sol -

Multiples of 18 = 18, 36, (54), 72, 90

Multiples of 27 = 27, (54), 81, 108, 135

L.C.M. = 54 Ans.

Find L.C.M.

Q3 (a) 3, 4 and 6

Sol - Multiples of 3 = 3, 6, 9, 12, 15Multiples of 4 = 4, 8, 12, 16, 20Multiples of 6 = 6, 12, 18, 24, 30

L.C.M. = 12 Ans.

(b) 2, 3 and 6

Sol -

Multiples of 2 = 2, 4, 6, 8, 10Multiples of 3 = 3, 6, 9, 12, 15Multiples of 6 = 6, 12, 18, 24, 30

L.C.M. = 6 Ans.

(c) 4, 6 and 9

Sol -

Multiples of 4 = 4, 8, 12, 16, 20, 24, 28, 32, 36, 40Multiples of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54, 60Multiples of 9 = 9, 18, 27, 36, 45, 54, 63, 72, 81, 90

L.C.M. = 36 Ans.

Q3 (d) 8, 9 and 12

Sol →

Multiples of 8 = 8, 16, 24, 32, 40, 48, 56, 64, (72), 80
 Multiples of 9 = 9, 18, 27, 36, 45, 54, 63, (72), 81, 90
 Multiples of 12 = 12, 24, 36, 48, 60, (72), 84, 96, 108, 120
 L.C.M. = 72 Ans.

(e) 10, 15 and 5

Sol - Multiples of 10 = 10, 20, (30), 40, 50, 60, 70, 80, 90, 100
 Multiples of 15 = 15, (30), 45, 60, 75, 90, 105, 120, 135, 150
 Multiples of 5 = 5, 10, 15, 20, 25, (30), 35, 40, 45, 50
 L.C.M. = 30 Ans.

(f) 6, 10 and 15

Sol - Multiples of 6 = 6, 12, 18, 24, (30), 36, 42, 48, 54, 60
 Multiples of 10 = 10, 20, (30), 40, 50, 60, 70, 80, 90, 100
 Multiples of 15 = 15, (30), 45, 60, 75, 90, 105, 120, 135, 150
 L.C.M. = 30 Ans.

(g) 8, 12 and 16

Sol - Multiples of 8 = 8, 16, 24, 32, 40, (48), 56, 64, 72, 80
 Multiples of 12 = 12, 24, 36, (48), 60, 72, 84, 96, 108, 120
 Multiples of 16 = 16, 32, (48), 64, 80, 96, 112, 128, 144, 160
 L.C.M. = 48 Ans.

(h) 4, 12 and 18

Sol → Multiples of 4 = 4, 8, 12, 16, 20, 24, 28, 32, (36), 40
 Multiples of 12 = 12, 24, (36), 48, 60, 72, 84, 96, 108, 120
 Multiples of 18 = 18, (36), 54, 72, 90, 108, 126, 144, 162, 180
 L.C.M. = 36 Ans.

Date ___/___/___

Q4 Find L.C.M.
Division Method.

We can solve this question by multiplication method, but it will take time.

So, we will solve by Division method.

(a) 3, 4 and 5

sol -

$$\begin{array}{r|l}
 2 & 3, 4, 5 \\
 \hline
 2 & 3, 2, 5 \\
 \hline
 3 & 3, 1, 5 \\
 \hline
 5 & 1, 1, 5 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 3 \times 5 \\
 &= 60 \text{ Ans.}
 \end{aligned}$$

(b) 5, 6 and 7

sol -

$$\begin{array}{r|l}
 2 & 5, 6, 7 \\
 \hline
 3 & 5, 3, 7 \\
 \hline
 5 & 5, 1, 7 \\
 \hline
 7 & 1, 1, 7 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 3 \times 5 \times 7 \\
 &= 210 \text{ Ans.}
 \end{aligned}$$

Q4 (a) 4, 7 and 9

Sol -

$$\begin{array}{r|l}
 2 & 4, 7, 9 \\
 \hline
 2 & 2, 7, 9 \\
 \hline
 3 & 1, 7, 9 \\
 \hline
 3 & 1, 7, 3 \\
 \hline
 7 & 1, 7, 1 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 3 \times 3 \times 7 \\
 &= 252 \text{ Ans}
 \end{aligned}$$

(b) 5, 8 and 11

Sol -

$$\begin{array}{r|l}
 2 & 5, 8, 11 \\
 \hline
 2 & 5, 4, 11 \\
 \hline
 2 & 5, 2, 11 \\
 \hline
 5 & 5, 1, 11 \\
 \hline
 11 & 1, 1, 11 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 5 \times 11 \\
 &= 440 \text{ Ans}
 \end{aligned}$$