

Date \_\_\_/\_\_\_/\_\_\_

Find L.C.M. (Division method)

Q1 (a) 8, 12

sol -

$$\begin{array}{r|l}
 2 & 8, 12 \\
 \hline
 2 & 4, 6 \\
 \hline
 2 & 2, 3 \\
 \hline
 3 & 1, 3 \\
 \hline
 & 1, 1
 \end{array}$$

L.C.M. =  $2 \times 2 \times 2 \times 3$   
 = 24 Ans.

(b) 9, 21

sol -

$$\begin{array}{r|l}
 3 & 9, 21 \\
 \hline
 3 & 3, 7 \\
 \hline
 7 & 1, 7 \\
 \hline
 & 1, 1
 \end{array}$$

L.C.M. =  $3 \times 3 \times 7$   
 = 63 Ans.

(c) 12, 18

sol -

$$\begin{array}{r|l}
 2 & 12, 18 \\
 \hline
 2 & 6, 9 \\
 \hline
 3 & 3, 9 \\
 \hline
 3 & 1, 3 \\
 \hline
 & 1, 1
 \end{array}$$

L.C.M. =  $2 \times 2 \times 3 \times 3$   
 = 36 Ans.

(d) 10, 25

sol -

$$\begin{array}{r|l}
 2 & 10, 25 \\
 \hline
 5 & 5, 25 \\
 \hline
 5 & 1, 5 \\
 \hline
 & 1, 1
 \end{array}$$

L.C.M. =  $2 \times 5 \times 5$   
 = 50 Ans.

Q2 @ 24 and 18

Sol -

$$\begin{array}{r|l}
 2 & 24, 18 \\
 \hline
 2 & 12, 9 \\
 \hline
 2 & 6, 9 \\
 \hline
 3 & 3, 9 \\
 \hline
 3 & 1, 3 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 3 \times 3 \\
 &= 72 \text{ Ans.}
 \end{aligned}$$

(b) 24 and 32

Sol -

$$\begin{array}{r|l}
 2 & 24, 32 \\
 \hline
 2 & 12, 16 \\
 \hline
 2 & 6, 8 \\
 \hline
 2 & 3, 4 \\
 \hline
 2 & 3, 2 \\
 \hline
 3 & 3, 1 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 2 \times 2 \times 3 \\
 &= 96 \text{ Ans.}
 \end{aligned}$$

Q3 @ 36 and 54

Sol -

$$\begin{array}{r|l}
 2 & 36, 54 \\
 \hline
 2 & 18, 27 \\
 \hline
 3 & 9, 27 \\
 \hline
 3 & 3, 9 \\
 \hline
 3 & 1, 3 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 3 \times 3 \times 3 \\
 &= 108 \text{ Ans.}
 \end{aligned}$$

(d) 48 and 72

Sol -

$$\begin{array}{r|l}
 2 & 48, 72 \\
 \hline
 2 & 24, 36 \\
 \hline
 2 & 12, 18 \\
 \hline
 2 & 6, 9 \\
 \hline
 3 & 3, 9 \\
 \hline
 3 & 1, 3 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 2 \times 3 \times 3 \\
 &= 144 \text{ Ans.}
 \end{aligned}$$

Q3 @ 21 and 63

Sol -

$$\begin{array}{r|l}
 3 & 21, 63 \\
 \hline
 3 & 7, 21 \\
 \hline
 7 & 7, 7 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 3 \times 3 \times 7 \\
 &= 63 \text{ Ans.}
 \end{aligned}$$

(b) 22 and 44

Sol -

$$\begin{array}{r|l}
 2 & 22, 44 \\
 \hline
 2 & 11, 22 \\
 \hline
 11 & 11, 11 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 11 \\
 &= 44 \text{ Ans.}
 \end{aligned}$$



Q3 (a) 39 and 65

$$\begin{array}{r|l} \text{Sol -} & 3 \overline{) 39, 65} \\ & 5 \overline{) 13, 65} \\ & 13 \overline{) 13, 13} \\ & \quad 1, 1 \end{array}$$

$$\begin{aligned} \text{L.C.M.} &= 3 \times 5 \times 13 \\ &= 195 \text{ Ans.} \end{aligned}$$

Q4 (a) 6, 8, 12

$$\begin{array}{r|l} \text{Sol -} & 2 \overline{) 6, 8, 12} \\ & 2 \overline{) 3, 4, 6} \\ & 2 \overline{) 3, 2, 3} \\ & 3 \overline{) 3, 1, 3} \\ & \quad 1, 1, 1 \end{array}$$

$$\begin{aligned} \text{L.C.M.} &= 2 \times 2 \times 2 \times 3 \\ &= 24 \text{ Ans.} \end{aligned}$$

(c) 20, 30, 40

$$\begin{array}{r|l} \text{Sol -} & 2 \overline{) 20, 30, 40} \\ & 2 \overline{) 10, 15, 20} \\ & 2 \overline{) 5, 15, 10} \\ & 3 \overline{) 5, 15, 5} \\ & 5 \overline{) 5, 5, 5} \\ & \quad 1, 1, 1 \end{array}$$

$$\begin{aligned} \text{L.C.M.} &= 2 \times 2 \times 2 \times 3 \times 5 \\ &= 120 \text{ Ans.} \end{aligned}$$

(b) 60 and 90

$$\begin{array}{r|l} \text{Sol -} & 2 \overline{) 60, 90} \\ & 2 \overline{) 30, 45} \\ & 3 \overline{) 15, 45} \\ & 3 \overline{) 5, 15} \\ & 5 \overline{) 5, 5} \\ & \quad 1, 1 \end{array}$$

$$\begin{aligned} \text{L.C.M.} &= 2 \times 2 \times 3 \times 3 \times 5 \\ &= 180 \text{ Ans.} \end{aligned}$$

(b) 12, 36, 48

$$\begin{array}{r|l} \text{Sol -} & 2 \overline{) 12, 36, 48} \\ & 2 \overline{) 6, 18, 24} \\ & 2 \overline{) 3, 9, 12} \\ & 2 \overline{) 3, 9, 6} \\ & 3 \overline{) 3, 9, 3} \\ & 3 \overline{) 1, 3, 1} \\ & \quad 1, 1, 1 \end{array}$$

$$\begin{aligned} \text{L.C.M.} &= 2 \times 2 \times 2 \times 2 \times 3 \times 3 = 144 \\ & \text{Ans} \end{aligned}$$

(b) 21, 27, 30

$$\begin{array}{r|l} \text{Sol -} & 2 \overline{) 21, 27, 30} \\ & 3 \overline{) 21, 27, 15} \\ & 3 \overline{) 7, 9, 5} \\ & 3 \overline{) 7, 3, 5} \\ & 5 \overline{) 7, 1, 5} \\ & 7 \overline{) 7, 1, 1} \\ & \quad 1, 1, 1 \end{array}$$

$$\begin{aligned} \text{L.C.M.} &= 2 \times 3 \times 3 \times 3 \times 5 \times 7 \\ &= 1890 \text{ Ans.} \end{aligned}$$

Q5 (a) 75, 125 and 150

$$\begin{array}{r|l}
 \text{Sol} \rightarrow & \\
 2 & 75, 125, 150 \\
 \hline
 3 & 75, 125, 75 \\
 \hline
 5 & 25, 125, 25 \\
 \hline
 5 & 5, 25, 5 \\
 \hline
 5 & 1, 5, 1 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 3 \times 5 \times 5 \times 5 \\
 &= 750 \text{ Ans.}
 \end{aligned}$$

Q5 (c) 56, 140 and 210

$$\begin{array}{r|l}
 \text{Sol} \rightarrow & \\
 2 & 56, 140, 210 \\
 \hline
 2 & 28, 70, 105 \\
 \hline
 2 & 14, 35, 105 \\
 \hline
 3 & 7, 35, 105 \\
 \hline
 5 & 7, 35, 35 \\
 \hline
 7 & 7, 7, 7 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 3 \times 5 \times 7 \\
 &= 840 \text{ Ans.}
 \end{aligned}$$

Q6 (a) 12, 15

$$\begin{array}{r|l}
 \text{Sol} \rightarrow & \\
 2 & 12, 15 \\
 \hline
 2 & 6, 15 \\
 \hline
 3 & 3, 15 \\
 \hline
 5 & 1, 5 \\
 \hline
 & 1, 1
 \end{array}$$

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

Q5 (b) 60, 80 and 180

$$\begin{array}{r|l}
 \text{Sol} \rightarrow & \\
 2 & 60, 80, 180 \\
 \hline
 2 & 30, 40, 90 \\
 \hline
 2 & 15, 20, 45 \\
 \hline
 2 & 15, 10, 45 \\
 \hline
 3 & 15, 5, 45 \\
 \hline
 3 & 5, 5, 15 \\
 \hline
 5 & 5, 5, 5 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 5 \\
 &= 720 \text{ Ans.}
 \end{aligned}$$

Q5 (d) 108, 120 and 132

$$\begin{array}{r|l}
 \text{Sol} \rightarrow & \\
 2 & 108, 120, 132 \\
 \hline
 2 & 54, 60, 66 \\
 \hline
 2 & 27, 30, 33 \\
 \hline
 3 & 27, 15, 33 \\
 \hline
 3 & 9, 5, 11 \\
 \hline
 3 & 3, 5, 11 \\
 \hline
 5 & 1, 5, 11 \\
 \hline
 11 & 1, 1, 11 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 5 \times 11 \\
 &= 11880 \text{ Ans.}
 \end{aligned}$$

Q5 (b) 24, 36

$$\begin{array}{r|l}
 \text{Sol} \rightarrow & \\
 2 & 24, 36 \\
 \hline
 2 & 12, 18 \\
 \hline
 2 & 6, 9 \\
 \hline
 3 & 3, 9 \\
 \hline
 3 & 1, 3 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 3 \times 3 \\
 &= 72 \text{ Ans.}
 \end{aligned}$$

Q6 (c) 39, 78

Sol -

$$\begin{array}{r|l}
 2 & 39, 78 \\
 \hline
 3 & 39, 39 \\
 \hline
 13 & 13, 13 \\
 \hline
 & 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 3 \times 13 \\
 &= 78 \text{ Ans.}
 \end{aligned}$$

Q7 (a) 8, 12 and 48

Sol -

$$\begin{array}{r|l}
 2 & 8, 12, 48 \\
 \hline
 2 & 4, 6, 24 \\
 \hline
 2 & 2, 3, 12 \\
 \hline
 2 & 1, 3, 6 \\
 \hline
 3 & 1, 3, 3 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 2 \times 3 \\
 &= 48 \text{ Ans.}
 \end{aligned}$$

Q6 (b) 30, 150 and 210

Sol -

$$\begin{array}{r|l}
 2 & 30, 150, 210 \\
 \hline
 3 & 15, 75, 105 \\
 \hline
 5 & 5, 25, 35 \\
 \hline
 5 & 1, 5, 7 \\
 \hline
 7 & 1, 1, 7 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 3 \times 5 \times 5 \times 7 \\
 &= 1050 \text{ Ans.}
 \end{aligned}$$

Q7 (c) 105, 135 and 240

Sol -

$$\begin{array}{r|l}
 2 & 105, 135, 240 \\
 \hline
 2 & 105, 135, 120 \\
 \hline
 2 & 105, 135, 60 \\
 \hline
 2 & 105, 135, 30 \\
 \hline
 3 & 105, 135, 15 \\
 \hline
 3 & 35, 45, 5 \\
 \hline
 3 & 35, 15, 5 \\
 \hline
 5 & 35, 5, 5 \\
 \hline
 7 & 7, 1, 1 \\
 \hline
 & 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M.} &= 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 5 \times 7 \\
 &= 15120 \text{ Ans.}
 \end{aligned}$$