(a) 16 and 48

2	16
2	8
2	4
2	2
	1

2	48
2	24
2	12
2	6
	3

LCM = 48

b) 8, 12, 16

2	8
2	4
	2

2	12
2	6
	3

2	16
2	8
2	4
	2

LCM - 48

c) 20 and 25

2	20
2	10
	5

5	25
	5

LCM = 100

d) 40 and 50

2	40
2	20
2	10
	5

2	50
5	25
	5

LCM - 200

e) 56, 64

2	56
2	28
2	14
	7

2	64
2	32
2	16
2	8
2	4
	2

LCM - 448

(f) 96 and 144

2	96
2	48
2	24
2	12
2	6
	3

2	144
2	72
2	36
2	18
3	9
	3

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

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

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

(g)

2	36
2	18
3	9
	3

2	42
3	21
	7

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

$42 = 2 \times 3 \times 7$

$= 252$

(b)

$$\begin{array}{r|l} 3 & 21 \\ \hline & 7 \end{array} \qquad \begin{array}{r|l} 3 & 36 \\ \hline 2 & 12 \\ \hline 2 & 6 \\ \hline & 3 \end{array}$$

$21 = 3 \times 7$

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

$LCM = 3 \times 7 \times 2 \times 2 \times 3 = 252$

i)

$$\begin{array}{r|l} 3 & 15 \\ \hline & 5 \end{array} \qquad \begin{array}{r|l} 3 & 45 \\ \hline 5 & 15 \\ \hline & 3 \end{array}$$

$15 = 3 \times 5$

$45 = 3 \times 5 \times 3$

$LCM = 3 \times 5 \times 3 = 45$

j 10, 20, 30

$$2\overline{)10} \quad 5 \qquad 2\overline{)20} \quad 5\overline{)10} \quad 2 \qquad 2\overline{)30} \quad 5\overline{)15} \quad 3$$

$10 = 2 \times 5$

$20 = 2 \times 5 \times 2$

$30 = 2 \times 5 \times 3$

LCM - 60