

EXERCISE 10(E)

Q2.

a. 16, 48

$$\begin{array}{r}
 2 \overline{) 16, 48} \\
 2 \overline{) 8, 24} \\
 2 \overline{) 4, 12} \\
 2 \overline{) 2, 6} \\
 3 \overline{) 1, 3} \\
 \hline
 1 \quad 1
 \end{array}$$

$$\text{L.c.m} \Rightarrow 2 \times 2 = 4 \times 2 = 8 \times 2 = 16 \times 3 = \overset{48}{\cancel{18} \times 1} = 48$$

(b) 8, 12, 16

$$\begin{array}{r}
 2 \overline{) 8, 12, 16} \\
 2 \overline{) 4, 6, 8} \\
 2 \overline{) 2, 3, 4} \\
 3 \overline{) 1, 3, 2} \\
 2 \overline{) 1, 1, 2} \\
 \hline
 1, 1, 1
 \end{array}$$

$$\begin{aligned}
 \text{L.c.m} \Rightarrow & \cancel{2} \times \cancel{2} = \cancel{4} \times \cancel{2} = 8 \times \cancel{3} = \cancel{24} \times \cancel{2} = 48 \\
 & 2 \times 2 = 4 \times 2 = 8 \times 2 = 16 \times 3 = \underline{48}
 \end{aligned}$$

(c) 20, 25

5	20, 25
5	4, 5
2	4, 1
2	2, 1
	1, 1

L.C.M \Rightarrow ~~5~~ ~~5~~ ~~5~~ ~~5~~ \times 5 = 25 \times 2 = 75 \times 2 =

150

(d) 40, 50

2	40, 50
5	20, 25
4	4, 5
5	1, 5
	1, 1

L.C.M \Rightarrow 2 \times 5 = 10 \times 4 = 40 \times 5 = 200

(a) 40, 50

2 | 40, 50
2 | 20, 25
5 | 10, 5
5 | 5, 1
1 | 1

L.C.M $\Rightarrow 2 \times 2 = 4, 4 \times 2 = 8, 8 \times 5 = 40$

(c) 56, 64

2 | 56, 64
2 | 28, 32
2 | 14, 16
2 | 7, 8
2 | 7, 4
2 | 7, 2
2 | 7, 1
1 | 1

L.C.M $\Rightarrow 2 \times 2 = 4 \times 2 = 8 \times 2 = 16 \times 2 = 32 \times 2 = 64$
64

(f) ~~36~~ 96, 144

3	96, 144
2	32, 48
2	16, 24
2	8, 12
2	4, 6
	2, 3

L.C.M $\rightarrow 3 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3 = 288$

(g) 36, 42

3	36, 42
2	18, 21
2	36, 42
2	18, 21
3	9, 7
3	3, 7
7	1, 2

L.C.M $\rightarrow 2 \times 2 \times 3 \times 3 \times 7 \times 1 \times 1$
 $= 252$

(h) 21, 36

$$\begin{array}{r}
 2 \times 2 \times 3 \times 3 \times 2 \mid 21, 36 \\
 2 \times 3 \times 2 \mid 21, 18 \\
 3 \mid 21, 9 \\
 3 \mid 7, 3 \\
 7 \mid 7, 1 \\
 \mid 1, 1
 \end{array}$$

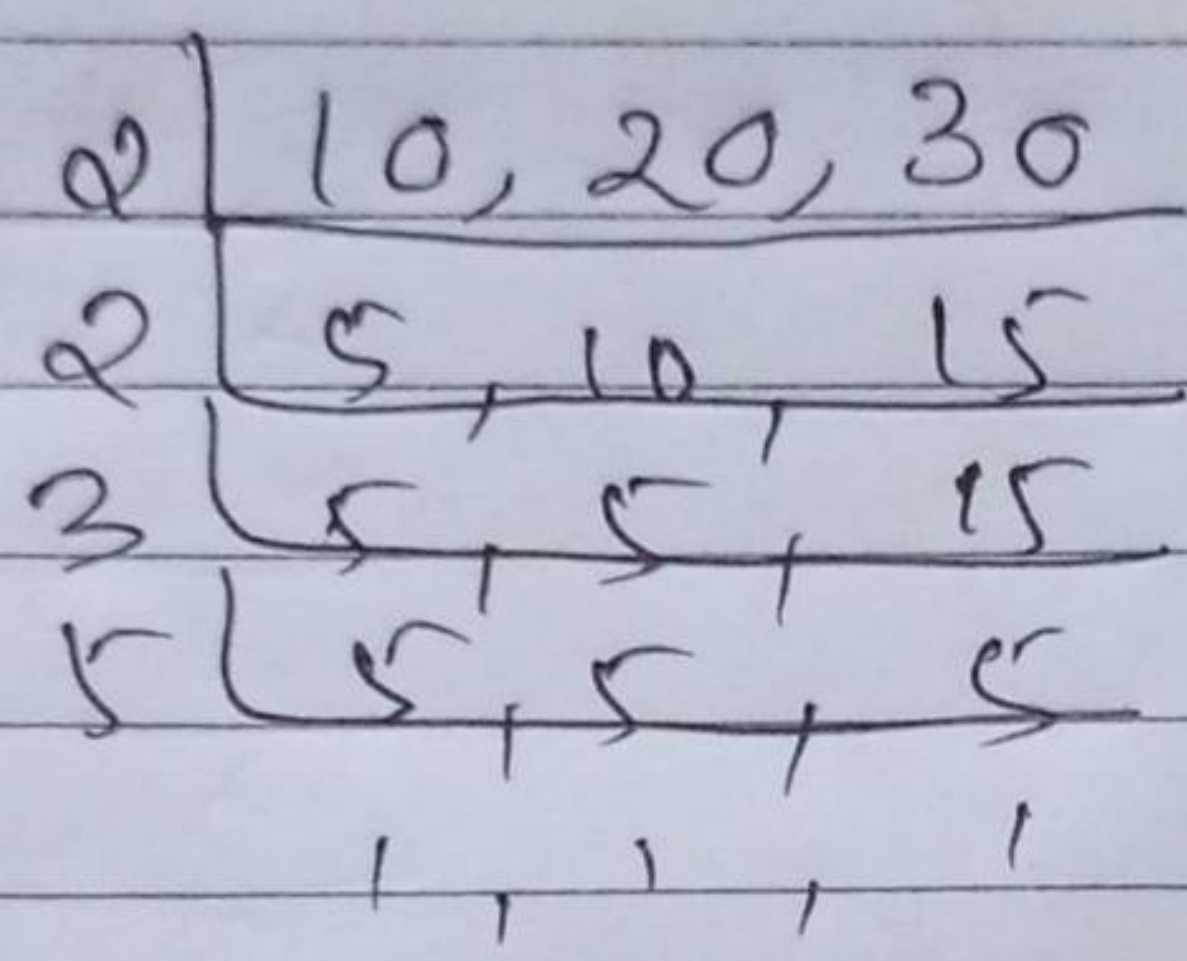
L.C.M $\Rightarrow 2 \times 2 = 4, 4 \times 3 = 12, 12 \times 3 = 36, 36 \times 7 = 252$

(i) 15, 45

$$\begin{array}{r}
 5 \mid 15, 45 \\
 3 \mid 3, 9 \\
 3 \mid 15, 45 \\
 3 \mid 5, 15 \\
 5 \mid 5, 5 \\
 \mid 1, 1
 \end{array}$$

L.C.M $\Rightarrow 3 \times 3 \times 5 = 45$

Q5) 10, 20, 30



$$L.C.M \Rightarrow 2 \times 2 \times 3 \times 5 = 60$$