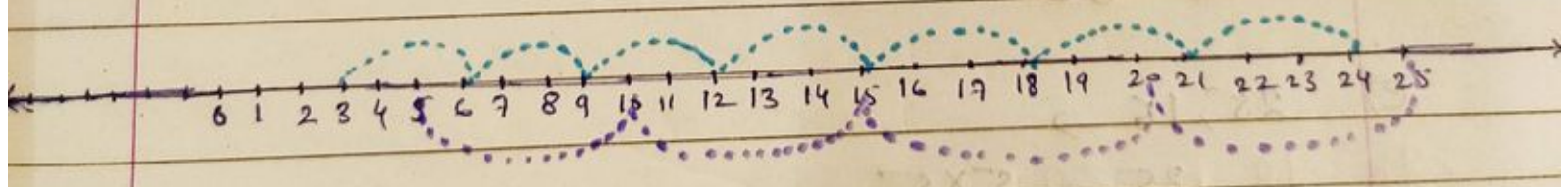


Exercise: - 5 A.

1) First find 6 multiples of each of these numbers and then find the common multiples. finally, find the L.C.M.

	Numbers	Common multiples.	L.C.M.
a.	6, 9	18, 36	18.
b.	5, 10	10, 20, 30	10.
c.	3, 6	6, 12, 18	6.
d.	3, 2, 4	12	12.

2. Use the number line to find the common multiples and lowest common multiple of 3 and 5.



L.C.M. = 15

Que³: These numbers have already been factorised. for you. find the LCM of the pairs given.

$8 = 2 \times 2 \times 2$, $25 = 5 \times 5$, $16 = 2 \times 2 \times 2 \times 2$, $10 = 2 \times 5$

1) 8, 16 \rightarrow $8 = 2 \times 2 \times 2$ \rightarrow $2 \times 2 \times 2 \times 2$
 $16 = 2 \times 2 \times 2 \times 2 = 16$ Ans.

b) $25, 10$

$\rightarrow 25 \rightarrow 5 \times 5$

$10 \rightarrow 2 \times 5$

$= 5 \times 2 \times 5$

$= 50$

c) $8, 25$

$8 = 2 \times 2 \times 2$

$25 = 5 \times 5$

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

$= 200$

d) $16, 10$

$16 = 2 \times 2 \times 2 \times 2$

$10 = 5 \times 2$

$\rightarrow 2 \times 2 \times 2 \times 5$

$= 80$

e) $25, 16$

$25 \rightarrow 5 \times 5$

$16 \rightarrow 2 \times 2 \times 2 \times 2$

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

$= 400$

Ques⁴ Find the LCM of these numbers using prime factorisation.

a) 16, 24 → First we will →

$$16 \rightarrow \underline{2} \times \underline{2} \times \underline{2} \times 2$$

$$24 \rightarrow \underline{2} \times \underline{2} \times \underline{3} \times 3$$

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

$$= 48 \text{ Ans}$$

b) 18, 20 → 18 → $\underline{2} \times 3 \times 3$

$$20 \rightarrow \underline{2} \times 2 \times 5$$

$$= 2 \times 2 \times 3 \times 3 \times 5$$

$$= 180 \text{ Ans}$$

c) 10, 18 →

$$10 \rightarrow \underline{2} \times 5$$

$$18 \rightarrow \underline{2} \times 3 \times 3$$

$$= 2 \times 3 \times 3 \times 5$$

$$= 90 \text{ Ans}$$

d) 15, 35 →

$$15 = \underline{5} \times 3$$

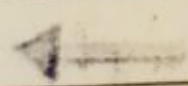
$$35 = \underline{5} \times 7$$

$$= 5 \times 3 \times 7 = 105 \text{ Ans}$$

e) 25, 30 →

$$25 = 5 \times 5$$

$$30 = 2 \times 5 \times 3$$



$$= 2 \times 3 \times 5 \times 5$$

$$= 150 \text{ Ans.}$$

f) 18, 32 →

$$18 = 2 \times 3 \times 3$$

$$32 = 2 \times 2 \times 2 \times 2 \times 2$$

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

$$= 288 \text{ Ans.}$$

g) 10, 15, 20 →

$$10 = 2 \times 5$$

$$15 = 3 \times 5$$

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

$$= 3 \times 2 \times 5 \times 2$$

$$= 60 \quad \underline{\text{Ans}}$$

(b) →

16, 12, 32 →

$$16 \rightarrow 2 \times 2 \times 2 \times 2$$

$$12 \rightarrow 2 \times 2 \times 3$$

$$32 \rightarrow 2 \times 2 \times 2 \times 2 \times 2$$

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

$$= 96 \quad \underline{\text{Ans}}$$