

Q2
02.09.2021

Q2/a 16 and 48

2	16	2	48
2	8	2	24
2	4	2	12
2	2	2	6
	1	3	3
			1

$16 = 2 \times 2 \times 2 \times 2 \times 1$
 $48 = 2 \times 2 \times 2 \times 2 \times 3 \times 1$

So, $2 \times 2 \times 2 \times 2 \times 3 \times 1 = 48$

LCM-48

Q2/b 8, 12, 16

2	8	2	12	2	16
2	4	2	6	2	8
2	2	3	3	2	4
	1		1	2	2
					1

$$8 = 2 \times 2 \times 2 \times 1$$

$$12 = 2 \times 2 \times 3 \times 1$$

$$16 = 2 \times 2 \times 2 \times 2 \times 1$$

~~So, $2 \times 2 \times 2 \times 2 \times 3 \times 2$~~

LCM = 48

$2 \times 2 \times 2 \times 2 \times 3 \times 1 = 48$

So, LCM = 48

c. 20 and 25

2	20	5	25
		5	5
2	10		1
5	5		
	1		

$20 = 2 \times 2 \times 5 \times 1$

$25 = 5 \times 5 \times 1$

So, $2 \times 2 \times 5 \times 5 \times 1$

LCM = 100

Q. 40 and 50

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

$$40 = 2 \times 2 \times 2 \times 5 \times 1$$

$$50 = 2 \times 5 \times 5 \times 1 \text{ or } 2 \times 2 \times 2 \times 5 \times 5 \times 1$$

$$LCM = 200$$

Q. 56 and 64

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

$$56 = 2 \times 2 \times 2 \times 7$$

$$64 = 2 \times 2 \times 2 \times 2 \times 2 \times 2$$

$$\text{or } 2 \times 2 \times 2 \times 7 \times 2 \times 2 \times 2 \times 1$$

$$LCM = 448$$

3.09.2021

f. 96 and 144

2		96		2		144
2		48		2		72
2		24		2		36
2		12		2		18
2		6		3		9
		3				3

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

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

$$\text{LCM} = 288$$

Q. 36, 42

2		36	
		<hr/>	
2		18	
		<hr/>	
3		9	
		<hr/>	
		3	
		<hr/>	

2		42	
		<hr/>	
3		21	
		<hr/>	
7		7	
		<hr/>	
		1	
		<hr/>	

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

$$42 = 2 \times 3 \times 7 \times 1$$

$$LCM = 252$$

~~Ans~~

Q. 21, 36

3		21	
		<hr/>	
7		7	
		<hr/>	
		1	
		<hr/>	

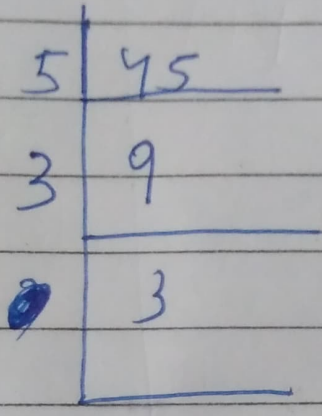
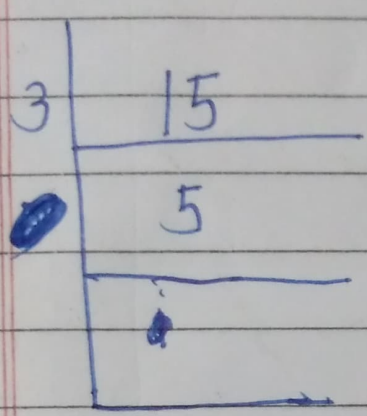
2		36	
		<hr/>	
2		18	
		<hr/>	
3		9	
		<hr/>	
3		3	
		<hr/>	
		1	
		<hr/>	

$$21 = 3 \times 7 \times 1$$

$$36 = 2 \times 2 \times 3 \times 3 \times 1$$

$$LCM = 252$$

I. 15 and 45

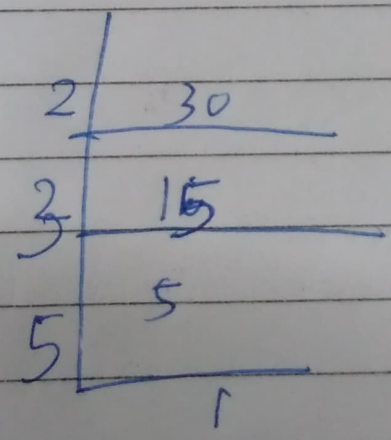
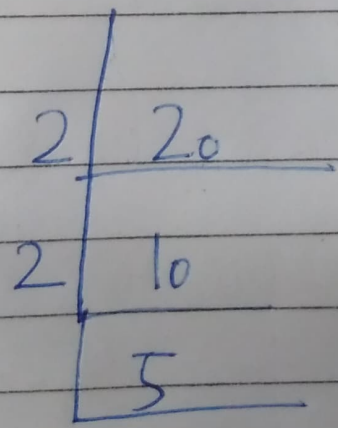
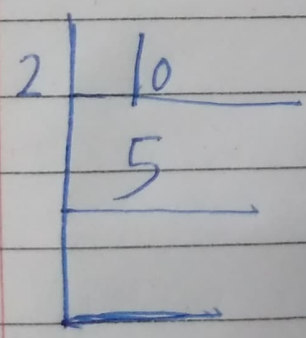


$15 = 3 \times 5 \times 1$

$45 = 5 \times 3 \times 3$

$LCM = 45$

II. 10, 20, 30



$10 = 2 \times 5$

$20 = 2 \times 2 \times 5$

$30 = 2 \times 3 \times 5$

$LCM = 2 \times 5 \times 2 \times 3 = 60$