

MULTIPLES AND FACTORS

Exercise 2

- 1 **List the first 10 multiples of the following numbers Find the common multiples and write the LCM also.**

(a) 2 and 3

Multiples of 2 are 2, 4, **6**, 8 ,10, **12**,14 ,16,
18 ,20

Multiples of 3 are 3, **6**, 9 ,**12**, 15, **18** ,21 ,24 ,27 ,30

Common multiples of 2 and 3 are **6, 12, 18**

LCM of 2 and 3 is = **6**

(b) 4 and 5

Multiples of 4 are = 4, 8 ,12, 16 ,**20** ,24, 28, 32, 36 ,40,

Multiples of 5 are = 5 ,10 ,15 ,**20**, 25 ,30, 35 ,40, 45, 50

Common multiples of

4 and 5 are

20 ,40

LCM of 4 and 5 is =

20

practice question

- d , e , f , h

- 2 **List the multiples of 12 , 15 and 20 and circle the common multiples and then find the LCM**

Multiples of 12 - 12 ,24 ,36 ,48 ,**60**,

72 ,84 ,96 ,108 ,**120**

Multiples of 15 - 15, 30 ,45, **60** ,75, 90 ,105 ,**120**,
135 , 150

Multiples of 20 - 20 ,40 ,**60** ,80, 100 ,**120**

140,160 ,180 ,200

Common multiples are - **60** and **120**

LCM = **60**

3 **Do it yourself**

4 **The first common multiple of 6 and 15 is 30 . The second common multiple of 6 and 15 is 60. Find the 3rd , 4th and 5th common multiple of 6 and 15.**

1st common multiple of 6 and 15 = 30

2nd common multiple of 6 and 15 = $2 \times 30 = 60$

3rd common multiple of 6 and 15 = $3 \times 30 = 90$

4th common multiple of 6 and 15 = $4 \times 30 = 120$

5th common multiple of 6 and 15 = $5 \times 30 = 150$

Thus 30, 60 ,90, 120 and 150 are common multiples of 6 and 15.

5. The LCM of 2 and 5 is 10 . Find the next 5 common multiples.

1st common multiple of 2 and 5 is = 10

2nd common multiple of 2 and 5 is $2 \times 10 = 20$

3rd common multiple of 2 and 5 is $3 \times 10 = 30$

4th common multiple of 2

and 5 is. $4 \times 10 = 40$

5th common multiple of 2 and

5 is $5 \times 10 = 50$

6th common multiple of 2 and 5 is $5 \times 10 = 60$

Thus 20 , 30,40, 50 , 60 are next 5 common multiples of 2 and 5.

6 Find the LCM by common division method -

(a) 32 and 40

2	32, 40
2	16, 20
2	8, 10
2	4, 5
	2, 5

LCM = $2 \times 2 \times 2 \times 2 \times 2 \times 5$
 $= 160$ Ans.

(c) 30 and 45

2	30, 45
3	15, 45
5	5, 15
	1, 3

LCM = $2 \times 3 \times 5 \times 3$
 $= 90$ Ans.

d) 15, 36 and 40

2	15, 36, 40
2	15, 18, 20
3	15, 9, 10
3	5, 3, 10
5	5, 1, 10
	1, 1, 2

LCM = $2 \times 2 \times 3 \times 3 \times 5 \times 2$
 $= 360$ Ans.

Practice b, f

6. Study the diagram carefully and answer the questions. (PAGE NO.131)

(Write it down in your book)

- a) List the multiples of 6 – 6 ,12 ,18, 24, 32, 36 ,42 ,48 ,54,60 ,66, 72,78
b) List the multiples of 9 - 9,18 ,27,36 45 ,54,63 ,72,81
c) List the common multiples of 6

and 9 – 18, 36 ,54 ,72

d) What is the LCM of 6 and 9 - 18

DON'T DRAW THIS IN COPY



