Chapter – 2

Numbers

Ex 2.1

Question 1. Find the common factors for: (i) 8 and 12 (ii) 24 and 30 (iii) 20 and 30

Answer:

(i) 8 and 12

The factors of 8 - 1, 2, 4, 8, The factors of 12 - 1, 2, 3, 4, 6, 12, The common factors of 8, 12 are 1, 2, 4

(ii) 24 and 30

The factors of 24 -	1,	2,	3,	4,	6,	8,	12,	24
The factors of 30 -	1,	2,	3,	5,	6,	10,	15,	30
The common factors	s are	24, 3	30 ar	e 1, 2	2, 3, 6)		

(iii) 20 and 30 The factors of 20 - 1, 2, 4, 5, 10, 20 The factors of 30 - 1, 2, 3, 5, 6, 10, 15, 30 The common factors of 20, 30 are 1, 2, 5, 10

Ex 2.1

Question 1. Choose the best answer:

(i) The number divisible by 5 with no remainder(a) 14(b) 535

(c) 447 (d) 316

Answer:

(b) 535

(ii) Pick the number which is not a multiple of 6.

(a) 18 (b) 26 (c) 72 (d) 36 Hint: (a) $18 = 6 \times 3$ (c) $72 = 8 \times 9$ (d) $36 = 6 \times 6$

Answer:

(b) 26

(iii) The common multiple of 4 and 8 among the given number is.
(a) 32
(b) 84
(c) 68
(d) 76
Hint:
Multiples of 4 = 4, 8, 12, 16, 20, 24, 28, 32, 36, 40
Multiples of 8 = 8, 16, 24, 32, 40, 48, 56, 64, ...
Common multiples of 4, 8 is 8, 16, 24, 32, 40,...

Answer:

(a) 32

(iv) Factors of 6
(a) 1, 2, 3
(b) 1, 6
(c) 1,2,3,6
(d) 2,3
Hint: Multiple of 9 are 9, 18, 27, 36, 45, 54, 63, 72, 81, 90,

(c) 1, 2, 3, 6

(v) Multiple of 9 is

(a) 79
(b) 87
(c) 29
(d) 72
Hint: Multiple of 9 are 9, 18, 27, 36, 45, 54, 63, 72, 81, 90,

Answer:

(d) 72

Question 2. Fill in the blanks:

Question 1.

Factors of 7 _____

Answer:

1, 7

Question 2.

The only even prime number is _____

Answer:

1,2

Question 3. L.C.M of 4, 12 _____

Answer: 12

Question 4.

L.C.M of 5, 15 _____

Answer:

15

Question 5.

The numbers which divides 35 without reminders are _____, ____, _____, _____,

Answer:

1, 5, 7

Question 3.

Write down the factors of the given numbers.

(i) 25
(ii) 36
(iii) 14
(iv) 16
(v) 12

Answer:

(i) 25 Factors of 25 is 1, 5, 25

(ii) 36 Factors of 36 is 1, 2, 3, 4. 6, 9, 12, 18, 36

(iii) 14 Factors of 14 is 1, 2, 7, 14

(iv) 16 Factors of 16 is 1, 2, 4, 8, 16

(v) 12 Factors of 1, 2, 3. 4, 6, 12

Question 4.

Draw a picture of factor tree. (i) 18 (ii) 33 (iii) 16 (iv) 50

Answer:

(i) 18



Question 5.

Write down the first 5 multiples of the given numbers.

- (i) 7 (ii) 9 (iii) 16 (iv) 11
- (v) 21

Answer:

(i) 7 = 7 Multiple of 7 – 7, 14, 21, 28, 35 (ii) 9 = 9 Multiple of 9 – 9, 18, 27, 36, 45

(iii) 16 = 16 Multiple of 16 – 16, 32, 48, 64, 80

(iv) 11

= 11 Multiple of 11 is 11, 22, 33, 44, 55

(V) 21

= 21 Multiple of 21 is 21, 42, 63, 84, 105

Question 6.

Find first three common multiples of the given numbers. (i) 24, 16 (ii) 12,9 (iii) 24,36

Answer:

(i) 24, 16
Multiples of 24 = 24, 48, 72, 96, 120, 144, 168, 192, 216, 240, 264
Multiples of 16 = 16, 32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192. 208, 224, 240, 256
Common multiples of 24 and 16 is 48, 96, 144, 192, 240

(ii) 12, 9
Multiples of 12 = 12, 24, 36, 48, 60, 72, 84, 96, 108, 120,
Multiples of 9 - 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108, 117
Common multiples of 12 and 9 is 36, 72, 108

(iii) 24, 36 Multiples of 24 = 24, 48, 72, 96, 120, 144, 168, 192, 216, Multiples of 36 = 36, 72, 108, 144, 180, 216 Common multiples of 24 and 36 is 72, 144, 216

Question 7.

Find L. C.M of the given numbers.(i) 12 and 28(ii) 16 and 24(iii) 8 and 14

(i) 12 and 28 Multiples of 12 = 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168, 180 Multiples of 28 = 28, 56, 84, 112, 140, 168, 196, Common multiples of 12 and 28 is 84, 168, LCM is 84

(ii) 16 and 24

Multiples of 16 = 16, 32, 48, 64, 80, 96, 112, 128, 114, Multiples of 24 = 24, 48, 72, 96, 120, 144, Common multiples of 16 and 24 is 48, 96, 144, LCM is 48

(iii) 8 and 14

Multiples of 8 = 8, 16, 24, 32, 4048, 56, 64, 72, 80, 88, 96, 104, 112, ... Multiples of 14 = 14, 28, 42, 56, 70,84 98 112 Common multiples of 8 and 14 is 56, 112,

(iv) 30 and 20

Multiples of 30 = 30, 60, 90, 120, 150, 180, 210, 240, 270, ...Multiples of 20 = 20, 40, 60, 80, 100, 120, 140, 160, 180, ...Common multiples of 30 and 20 is 60, 120, 180 LCM of 30 and 20 is 60.

Question 8.

Ramya visits the gym five days once and Kavitha visits the gym six days once. In which day will they meet each other?

Answer:

Multiples of 5 = 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ...Multiples of 6 - 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, ...Common multiples of 5 and 6 is 30, 60LCM of 5 and 6 is 30.

Question 9.

Arun and shahjahan goes for walking in a circular path of a park in the same direction. Arun takes 6 minutes to complete one round, while shahjahan takes 8 minutes to completed one round. In how many minutes will they meet each other?

Multiples of 6 = 6, 12, 18, 24, 30, 36, 42, 48, 54,...Multiples of 8 = 8, 16, 24, 32, 40, 48, 56, 64, ...Common multiples of 6 and 8 is 24, 48, ... LCM of 6 and 8 is 24. They will meet each other after 24 minutes.

InText Questions

Try These (Text Book Page No. 5)

 $1^{2} = 1 \times 1 = 1$ $2^{2} = 2 \times 2 = 4$ $3^{2} = 3 \times 3 = 9$ $4^{2} = 4 \times 4 = 16$ $5^{2} = 5 \times 5 = 25$ $6^{2} = 6 \times 6 = ___$ $7^{2} = 7 \times 7 = __$ $8^{2} = 8 \times 8 = __$ $9^{2} = 9 \times 9 = __$ $10^{2} = 10 \times 10 = __$

Answer:

 $1^{2} = 1 \times 1 = 1$ $2^{2} = 2 \times 2 = 4$ $3^{2} = 3 \times 3 = 9$ $4^{2} = 4 \times 4 = 16$ $5^{2} = 5 \times 5 = 25$ $6^{2} = 6 \times 6 = 36$ $7^{2} = 7 \times 7 = 49$ $8^{2} = 8 \times 8 = 64$ $9^{2} = 9 \times 9 = 81$ $10^{2} = 10 \times 10 = 100$

Activity (Text Book Page No. 6)

A. Count and Write the number of boxes:

Question 1. 1² Answer: 1 Question 2. **2**² Answer: 4 Question 3. 3² Answer: 9 Question 4. **4**² Answer:

16

B. Circle and colour the square numbers:

Question 1.

x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Work Sheet (Text Book Page No. 7)

I. Answer the following:

Question 1.

The square number of 2 is _____ Hint : $2 \times 2 = 4$

Answer:

4

Question 2. The square number of 5 is Hint : $5 \times 5 = 25$

Answer:

25

Question 3.



These number of boxes is equal to one square number, The number is _____

Answer: The number is 9

Question 4.

Which of following number is square number a. 23 b. 54 c. 36 d. 45 Hint = $62 = 6 \times 6 = 36$

Answer:

36

Question 5.

What is next square number of 49? a. 76 b. 95 C. 64 d. 45 Hint : $7 \times 7 = 49$ $8 \times 8 = 64$

Answer:

64

Try These (Text Book Page No. 8)

Find the Factors: Factors of 4 are 1, 2 and 4. Factors of 10 are 1, 2, 5 and 10. Factors of 16 are 1, 2, 4, 8 and 16. Factors of 18 are _____ Factors of 20 are _____ Factors of 24 are _____ Factors of 42 are _____

Answer: Factors of 18 are

1,2,3,6,9 and 18 are the factors of 18.

Factors of 20 are _____

20 2 × 10 4 × 5

1,2,4,5,10 and 20 are factors of 20.

Factors of 24 are _____



1,2,3,46,8, 12 and 24 are factors of 24.

Factors of 42 are _____



1,2,3,6,7,14,21 and 42 are factors of 42.

Activity (Text Book Page No. 9)

Factors											
NUMBERS	1	2	3	4	5	6	7	8	9	10	
316											
37											
20											
60											
448											
29											

Tick the factors of the following numbers

Answer:

			Fact	ors				
NUMBERS	1	2	3	4	5	6	8	10
316	~	~	1	~				
37	\checkmark	1011111			-			
20	~	~		~	~			V
60	~	~	\checkmark	\checkmark	V	~		\checkmark
448	~	~	-	\checkmark			V	
29	~							

Try These (Text Book Page No. 11)

5, 10, 15, ____, ____, ____, ____,

Answer: 20, 25, 30, 35, 40

Try These (Text Book Page No. 12)

Find L.C.M 1. 10 and 15 2. 8 and 6 3. 4 and 10 4.6 and 16

Answer:

1.10 and 15

Multiple of 10-10,20,30,40,50,60,70,80,90,100,...Multiple of 15-15,30,45,60,75,90,105,...

Common multiples of 10, 15 are 30, 60, 90, ... LCM of 10, 15 is 30.

2.8 and 6

Multiple of 8 - 8, 16, 24, 32, 40, 48, 56, ... Multiple of 15 - 6, 12, 18, 24, 30, 36, 42, 48, 54, ... Common multiples of 6, 8 are 24, 48, LCM of 6, 8 is 24.

3.4 and 10

Multiple of 4 = 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, ... Multiple of 10 = 10, 20, 30. 40, 50, 60, ... Common multiples of 4, 10 ore 20, 40, ... LCM of 4, 10 is 20.

(4) 6 and 16 Multiple of 6 – 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102, ... Multiple of 16 – 16, 32, 48, 64, 80, 96, 112, ... Common multiples of 6. 16 are 48, 96, ... LCM of 6, 16 is 48.

Think it (Text Book Page No. 12)

Can we say the highest common multiples for two numbers?

Answer: No only LCM