Chapter 8: Multiples and Factors

Problem Set 32 | Q 1 | Page 46
Write the factor of the following number.
8

SOLUTION

8 is exactly divisible by 1, 2, 4, 8. So, 1, 2, 4, 8 are factors of 8.

Problem Set 32 | Q 2 | Page 46
Write the factor of the following number.
5

SOLUTION

5 is exactly divisible by l, 5. So, 1, 5 are factors of 5.

Problem Set 32 | Q 3 | Page 46
Write the factor of the following number.
14

SOLUTION

14 is exactly divisible by 1, 2, 7, 14.
So, 1, 2, 7, 14 are the factors 14.

Problem Set 32 | Q 4 | Page 46
Write the factor of the following number.
10

SOLUTION

10 is exactly divisible by 1, 2, 5, 10.

So, 1, 2, 5, 10 are the factors of 10.

Problem Set 32 | Q 5 | Page 46
Write the factor of the following number.
7
SOLUTION

7 is exactly divisible by 1, 7. So, 1, 7 are factors of 7

Problem Set 32 | Q 6 | Page 46
Write the factor of the following number.
22

22 is exactly divisible by 1, 2, 11, 22.
So, 1, 2, 11, 22 are the factors of 22.

Problem Set 32 | Q 7 | Page 46
Write the factor of the following number.
25

SOLUTION

25 is exactly divisible by l, 5, 25.
So, 1, 5, 25 are the factors of 25.

Problem Set 32 | Q 8 | Page 46
Write the factor of the following number.
32

SOLUTION

32 is exactly divisible by 1, 2, 4, 8, 16, 32. So, 1, 2, 4, 8, 16, 32 are the factors of 32.

Problem Set 32 | Q 9 | Page 46
Write the factor of the following number.
33

SOLUTION

33 is exactly divisible by 1, 3, 11, 33.
So, 1, 3, 11, 33 are the factors of 33.

PROBLEM SET 33 [PAGE 48]

Problem Set 33 | Q 1.1 | Page 48
Write five three-digit numbers that are multiples of 2.

SOLUTION

100, 102, 104, 106, 108.

Problem Set 33 | Q 1.2 | Page 48
Write five three-digit numbers that are multiples of 5.

SOLUTION

100, 105, 110, 115, 120.

Problem Set 33 | Q 1.3 | Page 48
Write five three-digit numbers that are multiples of 10.

100, 110, 120, 130, 140.

Problem Set 33 | Q 2 | Page 48
Write 5 numbers that are multiples of 2 as well as of 3.

SOLUTION

2 as well as of 3 means 2 and 3 that is multiples of 6.

∴ They are 6, 12, 18, 24, 30

Problem Set 33 | Q 3 | Page 48
A ribbon is 3 meters long. Can we cut it into 50 cm pieces and have nothing left over? Write the reason why or why not.

SOLUTION

3 metres = 300 cm.
We can cut it into 50 cm pieces.
Since 300 is exactly divisible 50.
That is 300 in multiples of 50.
300 + 50 = 6 We will get 6 pieces, nothing is left over.

Problem Set 33 | Q 4 | Page 48
A ribbon is 3 meters long. I need 8 pieces of ribbon each 40 cm long. How many centimeters shorter is the ribbon than the length I need?

SOLUTION

1 piece of 40 cm, so for 8 pieces ribbion needed is 40 x 8 = 320 cm.
But ribbon is 3 metre = 300 cm long.
So ribbon is shorter by 320 - 300 = 20 cm.

Problem Set 33 | Q 5 | Page 48
If the number given in the table is divisible by the given divisor, put ✓ in the box. If it is not divisible by the divisor, put × in the box.

Divisor → Number ↓	2	5	10
15	×	✓	×
30			
34			
46			
55			
63			

Number	2	5	10
70			
84			

Divisor → Number ↓	2	5	10
15	×	✓	×
30	✓	✓	✓
34	✓	×	×
46	✓	×	×
55	×	✓	×
63	×	×	×
70	✓	✓	✓
84	✓	×	×

PROBLEM SET 34 [PAGE 49]

Problem Set 34 | Q 1 | Page 49
Write all the prime numbers between 1 and 20.

SOLUTION

2, 3, 5, 7, 11, 13, 17, 19.

Problem Set 34 | Q 2 | Page 49
Write all the composite numbers between 21 and 50.

SOLUTION

Composite numbers between 21 to 50 are 22, 24, 25, 26, 27, 28, 30, 32, 33, 34,35, 36, 38, 39, 40, 42, 44, 45, 46, 48, 49.

Problem Set 34 | Q 3 | Page 49
Find the prime numbers in the list given below.
22, 37, 43, 48, 53, 60, 91, 57, 59, 77, 79, 97, 100

SOLUTION

22, **37**, **43**, 48, **53**, 60, 91, 57, **59**, 77, **79**, **97**, 100

Problem Set 34 | Q 4 | Page 49
Which of the prime numbers are even numbers?

Only even prime number is 2.
(Rest of the even numbers are composites.)

PROBLEM SET 35 [PAGE 50]

Problem Set 35 | Q 1 | Page 50

Determine whether the pairs of numbers given below are co-prime numbers.
22, 24

SOLUTION

Common factors of 22 and 24 are 1 and 2. (Not only 1 common factor)
So, 22, 24 are not co-prime numbers.

Problem Set 35 | Q 2 | Page 50
Determine whether the pairs of numbers given below are co-prime numbers.
14, 21

SOLUTION

Common factors of 14 and 21 are 1 and 7. So, this pair is not co-prime numbers

Problem Set 35 | Q 3 | Page 50
Determine whether the pairs of numbers given below are co-prime numbers.
10, 33

SOLUTION

Common factors of 10 and 33 is only 1. So, 10 and 33 are co-prime numbers.

Problem Set 35 | Q 4 | Page 50
Determine whether the pairs of numbers given below are co-prime numbers.
11, 30

SOLUTION

Common factors of 11 and 30 are only 1. So, 11 and 30 are co-prime numbers.

Problem Set 35 | Q 5 | Page 50
Determine whether the pairs of numbers given below are co-prime numbers.
5, 7

SOLUTION

Common factor of 5 and 7 is only 1. So, 5 and 7 are co-prime numbers.

Problem Set 35 | Q 6 | Page 50
Determine whether the pairs of numbers given below are co-prime numbers.

15, 16

Common factors of 15 and 16 are only 1. So, 15 and 16 are co-prime numbers.

Problem Set 35 | Q 7 | Page 50
Determine whether the pairs of numbers given below are co-prime numbers.
50, 52

Common factors of 50 and 52 are 1 and 2. So, 50 and 52 are not co-prime numbers.

Problem Set 35 | Q 8 | Page 50
Determine whether the pairs of numbers given below are co-prime numbers.
17, 18

Common factors of 17 and 18 are only 1. So, 17 and 18 are co-prime numbers.