NCERT Solutions For Class 6 Maths Playing With Numbers Exercise 3.1

Exercise 3.1

Question 1:

Write all the factors of the following numbers:

(a) 24 (b) 15 (c) 21

(d) 27 (e) 12 (f) 20

(g) 18 (h) 23 (i) 36

Answer:

(a) 24

$24 = 1 \times 24$ $24 = 2 \times 12$ $24 = 3 \times 8$

$24 = 4 \times 6$ $24 = 6 \times 4$

∴Factors of 24 are 1, 2, 3, 4, 6, 8, 12, and 24

(b) 15

$15 = 1 \times 15$ $15 = 3 \times 5$ $15 = 5 \times 3$

∴Factors of 15 are 1, 3, 5, and 15

(c) 21

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

∴Factors of 21 are 1, 3, 7, and 21

(d) 27

$27 = 1 \times 27$ $27 = 3 \times 9$ $27 = 9 \times 3$

∴Factors of 27 are 1, 3, 9, and 27

(e) 12

$12 = 1 \times 12$ $12 = 2 \times 6$ $12 = 3 \times 4$ $12 = 4 \times 3$

∴Factors of 12 are 1, 2, 3, 4, 6, and 12

(f) 20

$20 = 1 \times 20$ $20 = 2 \times 10$ $20 = 4 \times 5$ $20 = 5 \times 4$

∴Factors of 20 are 1, 2, 4, 5, 10, and 20

(g) 18

$18 = 1 \times 18$ $18 = 2 \times 9$ $18 = 3 \times 6$ $18 = 6 \times 3$

∴Factors of 18 are 1, 2, 3, 6, 9, and 18

(h) 23

$23 = 1 \times 23$ $23 = 23 \times 1$

∴ Factors of 23 are 1 and 23

(i) 36

$36 = 1 \times 36$ $36 = 2 \times 18$ $36 = 3 \times 12$ $36 = 4 \times 9$

$36 = 6 \times 6$

∴Factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, and 36

Question 2:

Write first five multiplies of:

(a) 5 (b) 8 (c) 9

Answer:

(a) 5 × 1 = 5 5 × 2 = 10 5 × 3 = 15 5 × 4 = 20 5 × 5 = 25

∴ The required multiples are 5, 10, 15, 20, and 25.

(b) 8 × 1 = 8 8 × 2 = 16 8 × 3 = 24 8 × 4 = 32 8 × 5 = 40

∴ The required multiples are 8, 16, 24, 32, and 40.

(c) 9 × 1 = 9 9 × 2 = 18 9 × 3 = 27 9 × 4 = 36 9 × 5 = 45

∴ The required multiples are 9, 18, 27, 36, and 45.

Question 3:

Match the items in column 1 with the items in column 2.

Column 1	**Column 2**
(i) 35	(a) Multiple of 8
(ii) 15	(b) Multiple of 7
(iii) 16	(c) Multiple of 70
(iv) 20	(d) Factor of 30
(v) 25	(e) Factor of 50
-	(f) Factor of 20

Answer:

Column 1	**Column 2**
(i) 35	(b) Multiple of 7
(ii) 15	(d) Factor of 30
(iii) 16	(a) Multiple of 8
(iv) 20	(f) Factor of 20
(v) 25	(e) Factor of 50

Question 4:

Find all the multiples of 9 up to 100.

Answer:

9 × 1 = 9 9 × 2 = 18 9 × 3 = 27 9 × 4 = 36 9 × 5 = 45

9 × 6 = 54 9 × 7 = 63 9 × 8 = 72 9 × 9 = 81 9 × 10 = 90

9 × 11 = 99

Therefore, the multiples of 9 up to 100 are

9, 18, 27, 36, 45, 54, 63, 72, 81, 90, and 99

********** END **********