

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 × 24 24 = 2 × 12 24 = 3 × 8

 $24 = 4 \times 624 = 6 \times 4$ 

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

(b) 15

15 = 1 × 15 15 = 3 × 5 15 = 5 × 3

:: Factors of 15 are 1, 3, 5, and 15

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

:: Factors of 21 are 1, 3, 7, and 21

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

:: Factors of 27 are 1, 3, 9, and 27

### (e) 12

12 = 1 × 12 12 = 2 × 6 12 = 3 × 4 12 = 4 × 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 × 18 18 = 2 × 9 18 = 3 × 6 18 = 6 × 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 × 36 36 = 2 × 18 36 = 3 × 12 36 = 4 × 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) 
$$5 \times 1 = 5 5 \times 2 = 10 5 \times 3 = 15 5 \times 4 = 20 5 \times 5 = 25$$

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

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

(c) 
$$9 \times 1 = 99 \times 2 = 189 \times 3 = 279 \times 4 = 369 \times 5 = 45$$

.. 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   |

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Anomore

| 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:

$$9 \times 1 = 9 \ 9 \times 2 = 18 \ 9 \times 3 = 27 \ 9 \times 4 = 36 \ 9 \times 5 = 45$$
  
 $9 \times 6 = 54 \ 9 \times 7 = 63 \ 9 \times 8 = 72 \ 9 \times 9 = 81 \ 9 \times 10 = 90$   
 $9 \times 11 = 99$ 

Therefore, the multiples of 9 up to 100 are

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

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