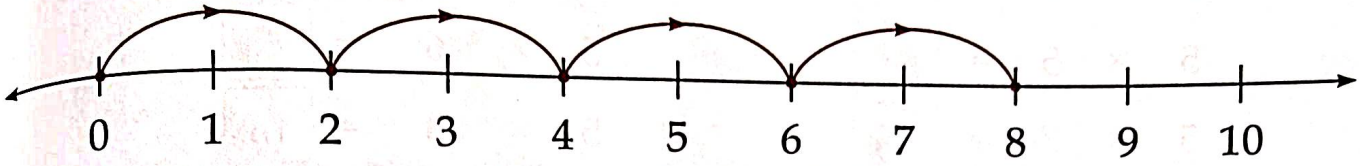
MULTIPLICATION TABLE BY SKIP COUNTING

Multiply 4 by 2



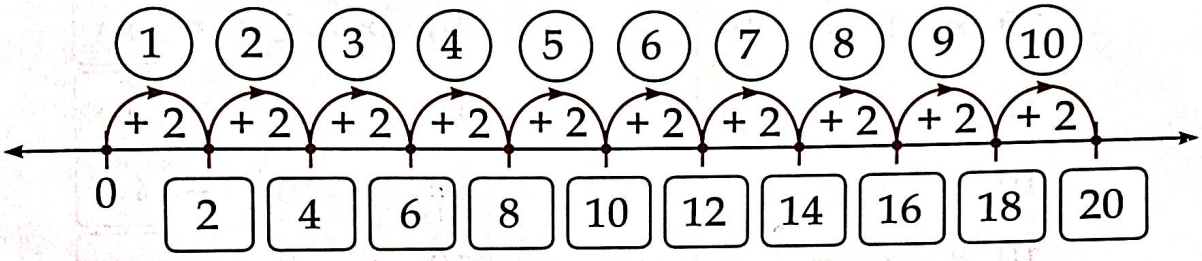
Using the method of skip counting, count by twos starting from 0. There are four jumps of two steps each.

$\therefore$ 4 jumps = $4 \times 2 = 8$

Exercise 5.3

1. Fill in the boxes.

(a)



$2 \times 1 = \boxed{2}$ $\quad 2 \times 2 = \boxed{4}$

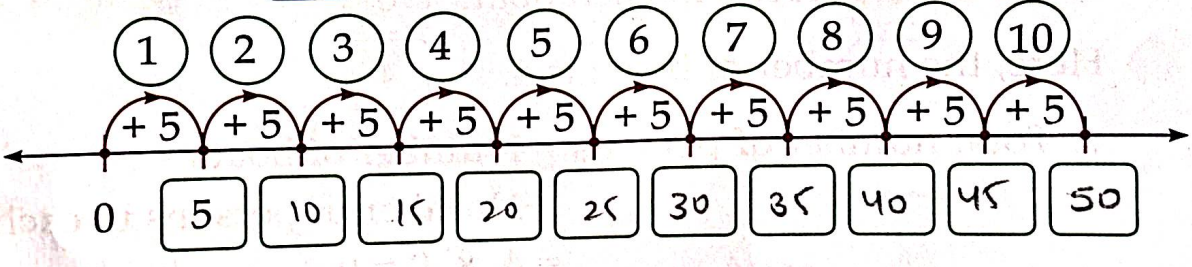
$2 \times 3 = \boxed{6}$ $\quad 2 \times 4 = \boxed{8}$

$2 \times 5 = \boxed{10}$ $\quad 2 \times 6 = \boxed{12}$

$2 \times 7 = \boxed{14}$ $\quad 2 \times 8 = \boxed{16}$

$2 \times 9 = \boxed{18}$ $\quad 2 \times 10 = \boxed{20}$

(b)



$5 \times 1 = 5$ $\quad 5 \times 2 = 10$

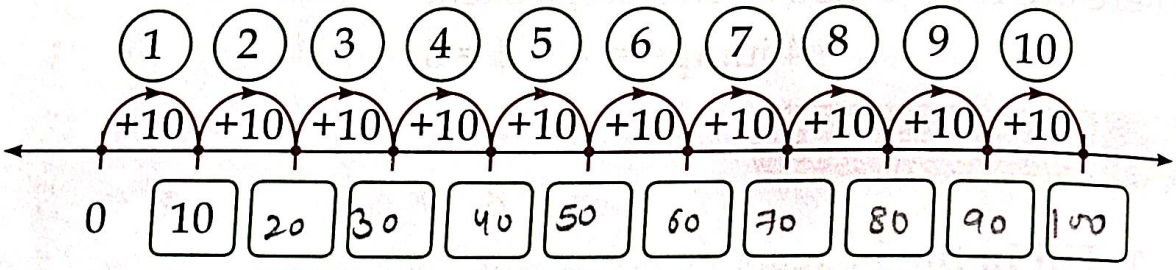
$5 \times 3 = 15$ $\quad 5 \times 4 = 20$

$5 \times 5 = 25$ $\quad 5 \times 6 = 30$

$5 \times 7 = 35$ $\quad 5 \times 8 = 40$

$5 \times 9 = 45$ $\quad 5 \times 10 = 50$

(c)



$10 \times 1 = 10$ $\quad 10 \times 2 = 20$

$10 \times 3 = 30$ $\quad 10 \times 4 = 40$

$10 \times 5 = 50$ $\quad 10 \times 6 = 60$

$10 \times 7 = 70$ $\quad 10 \times 8 = 80$

$10 \times 9 = 90$ $\quad 10 \times 10 = 100$

PROPERTIES OF MULTIPLICATION

1. Multiplication by zero

There are 0 persons in each boat. 0

Here, the number of boats is 4. 4

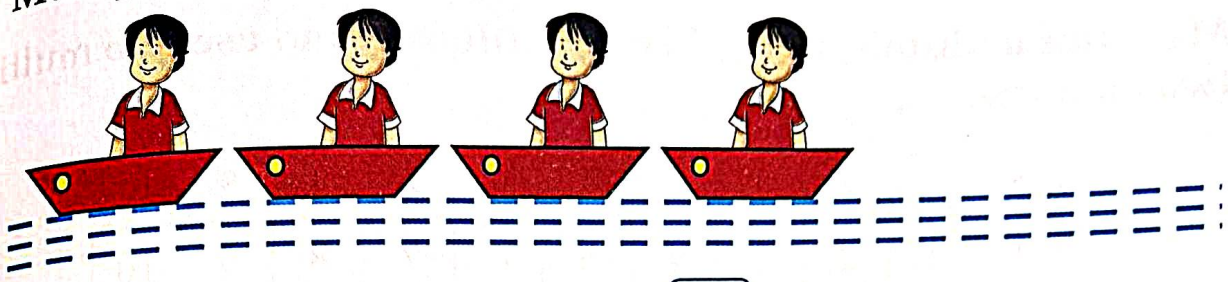
∴ Total number of persons = Number of boats × Number of persons in each boat

$= 4 \times 0 = 0$

There are 0 persons in all.

Hence, any number multiplied by 0 is zero.

2. **Multiplication by 1.**



There is one person in each boat. 1

Here, the number of boats is 4. 4

∴Total number of persons = 4 × 1 = 4

There are 4 persons in all.

Hence, any number multiplied by 1 is the number itself.

3. **The order of multiplication can be interchanged.**

Since $2 \times 5 = 10$ or $5 \times 2 = 10$,

Therefore, $2 \times 5 = 5 \times 2 = 10$

Hence, 2×5 is the same as 5×2.

Exercise 5.4

Find the product and fill in the boxes.

1. $8 \times 10 =$ 80
2. $6 \times 1 =$ 6
3. $10 \times 1 =$ 10
4. $6 \times 0 =$ 0
5. $5 \times 0 =$ 0
6. $1 \times 0 =$ 0
7. $3 \times 1 =$ 3
8. $1 \times 1 =$ 1

Thus, $5 \times 7 = 7 \times 5 = 35$

We observe that when the order of multiplication is changed, the answer remains unchanged.

Multiply the following numbers using the above grid.

(a) $3 \times 9 =$ 27

(b) $5 \times 6 =$ 30

(c) $6 \times 8 =$ 48

(d) $7 \times 3 =$ 21

(e) $3 \times 9 =$ 27

(f) $9 \times 5 =$ 45

(g) $2 \times 6 =$ 12

(h) $10 \times 9 =$ 90

(i) $9 \times 9 =$ 81

(j) $5 \times 9 =$ 45

(k) $4 \times 9 =$ 36

(l) $9 \times 4 =$ 36

(m) $3 \times 10 =$ 30

(n) $10 \times 3 =$ 30

Use the multiplication grid and find two numbers which when multiplied by each other give:

(a) $18 =$ 6 $\times$ 3 $=$ 3 $\times$ 6

(b) $24 =$ 3 $\times$ 8 $=$ 8 $\times$ 3

(c) $27 =$ 3 $\times$ 9 $=$ 9 $\times$ 3

(d) $36 =$ 4 $\times$ 9 $=$ 6 $\times$ 6

(e) $45 =$ 5 $\times$ 9 $=$ 9 $\times$ 5

(f) $60 =$ 6 $\times$ 10 $=$ 10 $\times$ 6

(g) $72 =$ 8 $\times$ 9 $=$ 9 $\times$ 8

(h) $90 =$ 9 $\times$ 10 $=$ 10 $\times$ 9