

ROUNDING OFF NUMBERS

Rounding means making a number simpler but keeping its value close to what it was.

The result is less accurate, but easier to use.

Rounding off to the nearest 10 →

Example → Round off 72 to the nearest 10

While rounding numbers to the nearest 10, we check the digit in the ones place. If the digit in ones place is less than 5, then that number is rounded down to the nearest 10.

So, 7(2) is rounded down to 70 ($2 < 5$)

→ If the digit in ^{place}ones is more than or equals to 5, then that number is rounded up to the nearest 10.

Example → Round off 34(8) to the nearest 10. ($8 > 5$)

So, 348 is rounded up to 350.

Rounding off to the nearest 100 →

While rounding numbers to the nearest 100, we check the digit in the tens place.

→ If the digit in tens place is less than 5, then that number is rounded down to the nearest 100.

Example → Round off 15,728 to the nearest 100.

Here, 2 is in tens place and $2 < 5$

So, 15,728 rounded down to 15,700

→ If the digit in tens place is more than or equals to 5, then that number is rounded upto the nearest 100.

Example → 3,25,373

Round off 3,25,373 to the nearest 100.

Here, 7 is in tens place and $7 > 5$

So, 3,25,373 rounded upto 3,25,400

Rounding off to the nearest 1000 →

While rounding numbers to the nearest 1000, we check the digit in hundreds place.

→ If the digit in hundreds place is less than 5, then that number is rounded down to nearest 1000.

Example → 2,37,468

Round off this number to the nearest 1000.

Here, 4 is in hundreds place and $4 < 5$

So, 2,37,468 is rounded down to 2,37,000

→ If the digit in hundreds place is more than or equals to 5, then that number is rounded upto nearest 1000.

Example → Round off 1,43,579 to the nearest 1000.

Here, 5 is in hundreds place and $5 = 5$

So, 1,43,579 rounded upto 1,44,000.

Exercise - 1.5

A) Round off the following numbers to the nearest 10.

1) 47

In 47, 7 is in its ones place and $7 > 5$
So, 47 rounded off to the nearest 10 is 50

3) 61

In 61, 1 is in its ones place and $1 < 5$
So, 61 rounded off to the nearest 10 is 60

5) 525

In 525, 5 is in its ones place and $5 = 5$
So, 525 rounded off to the nearest 10 is 530.

12) 9143

In 9143, 3 is in its ones place and $3 < 5$
So, 9143 rounded off to the nearest 10 is 9140.

B) Round off the following numbers to the nearest 100.

1) 231

In 231, 3 is in its tens place and $3 < 5$.
So, 231 rounded off to the nearest 100 is 200

4) 3056

In 3056, 5 is in its tens place and $5 = 5$
So, 3056 rounded off to the nearest 100 is 3100.

10) 8432

In 8432, 3 is in its tens place and $3 < 5$
So, 8432 rounded off to the nearest 100 is 8400.

6) 20⁹⁰

In 2090, 9 is in its tens place and $9 > 5$
So, 2090 rounded off to the nearest 100 is
2100.

7) Round off the following numbers to the nearest 1000.

1) 3²⁵¹

In 3251, 2 is in its hundreds place and $2 < 5$
So, 3251 rounded off to the nearest 1000 is
3000.

2) 9⁹⁹⁹

In 9999, 9 is in its hundreds place and $9 > 5$
So, 9999 rounded off to the nearest 1000 is 10,000

10) 62,⁵⁹²

In 62,592, 5 is in its hundreds place and $5 = 5$
So, 62,592 rounded off to the nearest 1000 is
63,000.

11) 73,⁹⁸⁹

In 73,989, 9 is in its hundreds place and $9 > 5$
So, 73,989 rounded off to the nearest 1000 is
74000.

12) 91,430

In 91,430, 4 is in its hundreds place and $4 < 5$
So, 91,430 rounded off to the nearest 1000 is 91,000.

H.W

→ Do Exercise - 1.5 in your copy like above.

→ Learn the explanations given.