Finding the Face Value and Place Value of Numbers

Place value refers to the value of a digit based on its position in a number. In a number, each digit represents a certain place value: ones, tens, hundreds, thousands, etc.

For example, in the number 3,472:

- 3 is in the thousands place, so its place value is 3,000.
- 4 is in the hundreds place, so its place value is 400.
- 7 is in the tens place, so its place value is 70.
- 2 is in the ones place, so its place value is 2.

Face Value:

The face value of a digit is the digit itself, regardless of its place in the number. The face value of a digit does not change based on its position.

For example, in the number 3,472:

- The face value of 3 is 3.
- The face value of 4 is 4.
- The face value of 7 is 7.
- The face value of 2 is 2.

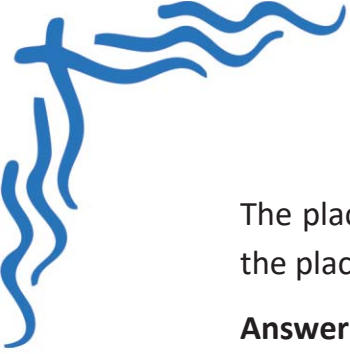## Properties of Place Value and Face Value

- The place value of a digit depends on its position in the number and is always a multiple of 10 (e.g., ones, tens, hundreds, thousands).
- The face value of a digit is always the same, no matter where it appears in the number.
- The place value tells us the actual value of a digit in the number, while the face value is just the digit itself.

Example 1

Question: What is the place value and face value of the digit 5 in the number 5,613?

Solution:

The face value of 5 is simply 5.

The place value of 5 is determined by its position. It is in the thousands place, so the place value is 5,000.

Answer:

- Face value = 5
- Place value = 5,000

Example 2

Question: What is the place value and face value of the digit 6 in the number 4,698?

Solution: The face value of 6 is simply 6.

The place value of 6 is determined by its position. It is in the hundreds place, so the place value is 600.

Answer:

- Face value = 6
- Place value = 600

Summary Points

- Place value depends on the position of a digit in a number and tells us the value of the digit.
- Face value is simply the digit itself and does not change regardless of its position.
- The place value of digits in a number helps us understand how large or small the number is, while face value helps identify individual digits.