

The point of signed numbers is for the computer to understand negative and positive numbers. Computers use binary code to store and process information, and binary code only has two symbols: 0 and 1. Without signed numbers, computers would not be able to represent negative numbers.

Signed numbers are used in many different applications, including:

- Arithmetic operations: Signed numbers are used to perform arithmetic operations on numbers, such as addition, subtraction, multiplication, and division.
- Comparisons: Signed numbers are used to compare numbers, such as to determine if one number is greater than, less than, or equal to another number.
- Logic operations: Signed numbers are used to perform logic operations on numbers, such as AND, OR, and NOT.
- Data storage: Signed numbers are used to store data in memory, such as the values of variables and the results of arithmetic operations.
- File formats: Signed numbers are used in many different file formats, such as image files, audio files, and video files.

Signed numbers are an essential part of computer science and engineering. They allow computers to represent and process negative numbers, which is necessary for many different applications.

Here are some examples of how signed numbers are used in the real world:

- When you use a calculator to perform arithmetic operations, the calculator uses signed numbers to represent the numbers that you enter and the results of the operations.
- When you use a computer to write a document, the computer uses signed numbers to represent the text in the document.
- When you use a computer to watch a video, the computer uses signed numbers to represent the audio and video data in the video file.
- When you use a computer to play a game, the computer uses signed numbers to represent the positions of the characters and objects in the game world.

Signed numbers are an essential part of modern computing. They are used in a wide variety of applications, and they are essential for understanding how computers work.