Intro:

"When dealing with computational complexity and notation in algorithms, three Greek letters frequently appear: omega, theta, and Omicron, often referred to simply as 'O' in the context of big O notation. Big O is typically what you'll encounter most often."

A1:

"To illustrate, let's consider an array and a for loop designed to find a specific number within that array. Imagine we're searching for the number one."

A2:

"In this scenario, if the number one is positioned at the beginning of the array, we encounter what's known as the best case scenario—the fewest iterations are needed. This is symbolically represented by the Greek letter omega."

A3:

"Conversely, if the number one is towards the end, we face the worst case scenario, requiring the most iterations through the array. This is what we call big O or Omicron, which is always indicative of the worst case scenario in algorithm analysis."

A4:

"Furthermore, if the number one is located somewhere in the middle, reflecting a more typical situation, it represents the average case, denoted by the Greek letter theta."

Outro:

"It’s crucial to understand that when we discuss big O, we're specifically talking about the worst case scenario. While it’s common to hear references to 'best case' or 'average case' big O, technically, these should be referred to as omega for best case and theta for average case, not big O."