Main Ideas

Here are the main points that are addressed in the video. Please read these and think about them as you watch.

- An antiderivative of a function $f(x)$ is a functions whose derivative is $f(x)$

- The *general antiderivative* represents all the functions whose derivatives are $f(x)$. If $F(x)$ is an antiderivative to $f(x)$, meaning $F'(x) = f(x)$, then $F(x) + C$ represents all the functions whose derivatives are $f(x)$, where C represents any constant.

- The reason for the term C is that the derivative of a constant is 0, so adding a (positive or negative) constant to a function will not change the derivative, so the derivative of $F(x) + C$ is the same as the derivative of $F(x)$.