Base number systems

In the video we were shown how to convert a base ten number (100) to a base 8 number system.

We start by finding the highest power of 8 that can fit in 100, which was 8^2=64.

We then divided 100 by 64 and got our first digit of our base 8 conversion 1, and used the remainder (36) to continue the process.

We then divided 36 by 8 to get our next digit 4. We had the remainder of 4 again to find our last digit.

To find our last digit using our remainder of 4 we used 8^0 which is 1 and divided our remainder4 by 1. Our answer was 4.

Lastly we placed all of our solutions together 1,4,4. So 100 written in base 8 is 144.