I've been using Uniswap since August 2020 but I'm a little bit lost about new features that come with V3.

I've read this article and some questions came to my mind:

1. Why do we say that with Uniswap V2, part of the liquidity provides is never put to use.

The article states:

In Uniswap v2, liquidity is distributed evenly along an $x^*y=k$ price curve, with assets reserved for all prices between 0 and infinity. For most pools, a majority of this liquidity is never put to use.

I don't understand it because when I put some liquidity, this liquidity is "mixed" with the whole liquidity pool. So I don't understand why the liquidity I provided

would be less used than other.

I missed something but find understand what.

1. I don't understand the Capital efficiency comparison between V2 and V3

The article describes the following example:

[

image

1200×607 86.9 KB

](https://global.discourse-

cdn.com/business6/uploads/uniswap1/original/2X/f/f7e068d32051d59ae07607276aa81e34e46b21d4.png)

I understand the conclusion: with less capital, we are able to earn the same.

But I don't understand the diagram. How is the APR calculated? Can someone get a little bit into the details of how you got the figures on this diagram?

Thank you so much for your explanation!