# Answer the following questions:

## List two changes in the Cortex-A72 that improve performance.

* 1. On the level of the instruction fetch block we see ***a brand new branch-predictor*** that follows ***a new sophisticated algorithm*** that improves performance and reduces power through reduced misprediction and speculation, which has been cut down by 50% for mispredictions and 25% for speculation when compared to the A57.
  2. To improve performance, ***the effective decode bandwidth has been increased***, and the decoder has received some AArch64 instruction-fusion enhancements.

## List two changes in the Cortex-A72 that improve power consumption.

* 1. Meanwhile power consumption has been tempered at multiple levels, including ***optimizing decoding directly***,
  2. and in other ***power optimizations to the buffers and flow-control hardware that work around the decoder***.

## This is not answered in the articles, but can you currently buy hardware that contains a Cortex-A72 processor in it?

No there is not. ARM only recently announced the ARM Cortex-A72 processor. And I did not see any develop board with Cortex-A72 on it.