

1 - The Antikythera mechanism is a gear based analogue computer used to predict planet positions and eclipses according to an accurate calendar. It works by utilizing a system of 37 gears and an outside hand crank to adjust the date. I think the Antikythera mechanism fits our definition because the gears are doing calculations of astronomical positions based on how the hand crank is turned to adjust the gears. This is similar to our diagram of a CPU where the controller uses control signals to tell the Datapath what to do. However, in the case of the Antikythera mechanism calculations are continuous since the gears won't be stopped in the same exact place easily.

2 - binary: 0000-00 10-001 1-0010 1000-0 000-00 10-0010

Hex: 0x02328022

bit field	op	rs	rt	rd	shamt
funct					

3 - binary: 0001-00 01-001 0-1100 1111-1111-1111-0011

Hex: 0x112cfff3

bit field	op	rs	rt	constant
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4 - Uploaded (Hex added with comments)

5 - I assumed they were not string/char and also that they were unsigned and in base 10 (I used multu)

6 - Uploaded