

**ok now we kind of know what all the parts of euler's identity  
are. let's take a look at it again**

$$e^{\pi i} + 1 = 0$$

**it's wild to me that these three weird numbers e,  $\pi$  and i have  
anything to do with each other, much less anything so simple**

why????????????????????????????????

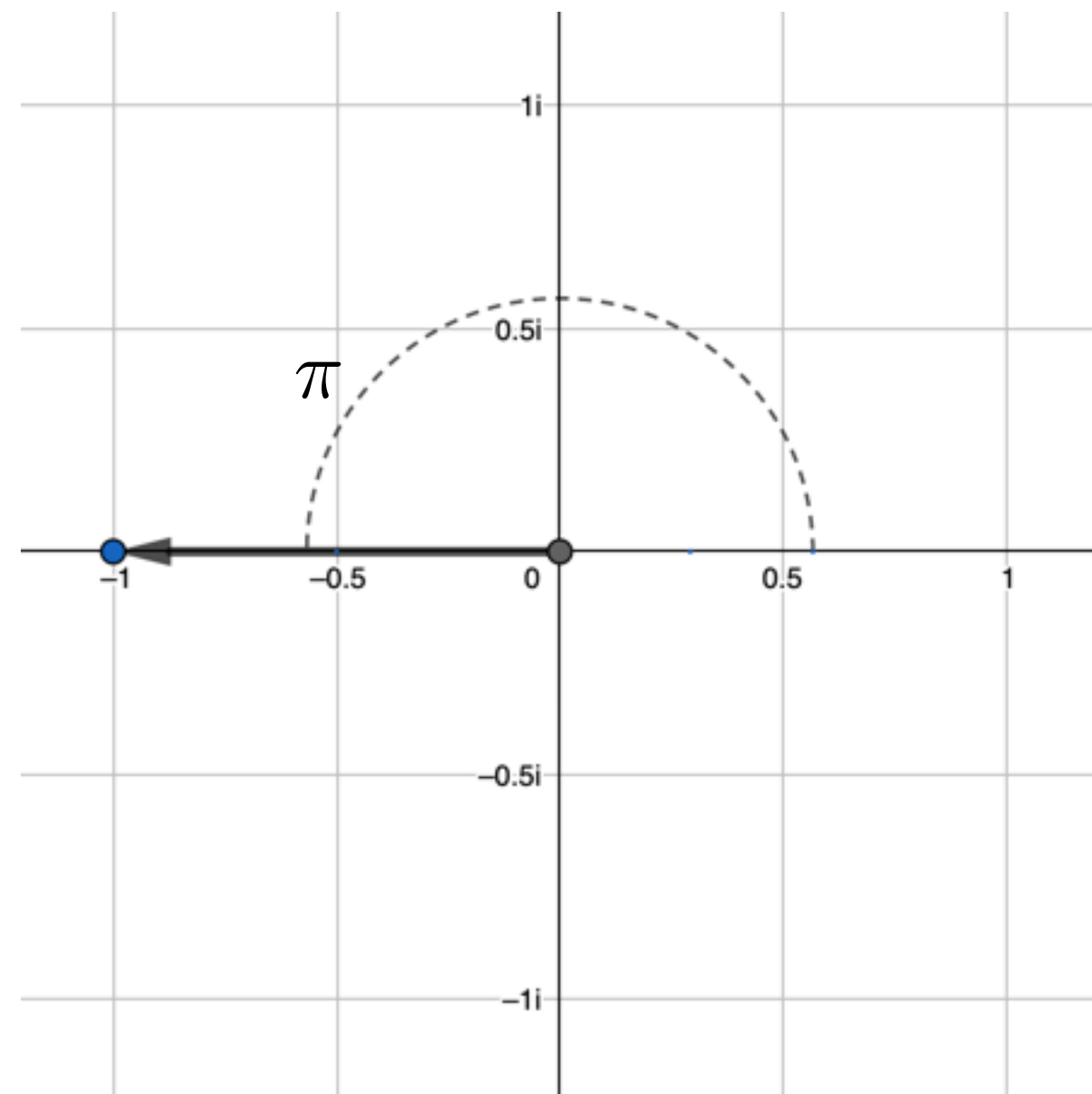
why is euler's identity true?????!!!!??!????!!

ok here is the first hint of why: rewrite it like this

$$e^{\pi i} = -1$$

it doesn't have the elegant beauty of containing both 0 and 1 but we're trying to get to the bottom of things now!

and remember this picture of the complex plane:



hmm. a rotation of  $\pi$  radians in the complex plane puts you at -1. hmmmmm. hmmmmmmmmmmm.

note: i will not actually be answering the question "why is euler's identity true"