

aside: i hate the term "imaginary"

it is actually no more or less imaginary than the rest of math

First of all what absolute fool came up with this name

Who says there's not a number that you can square to get -1

All we have to do is call it something and now it exists for real. *Behold*

$$\sqrt{-1} = i$$

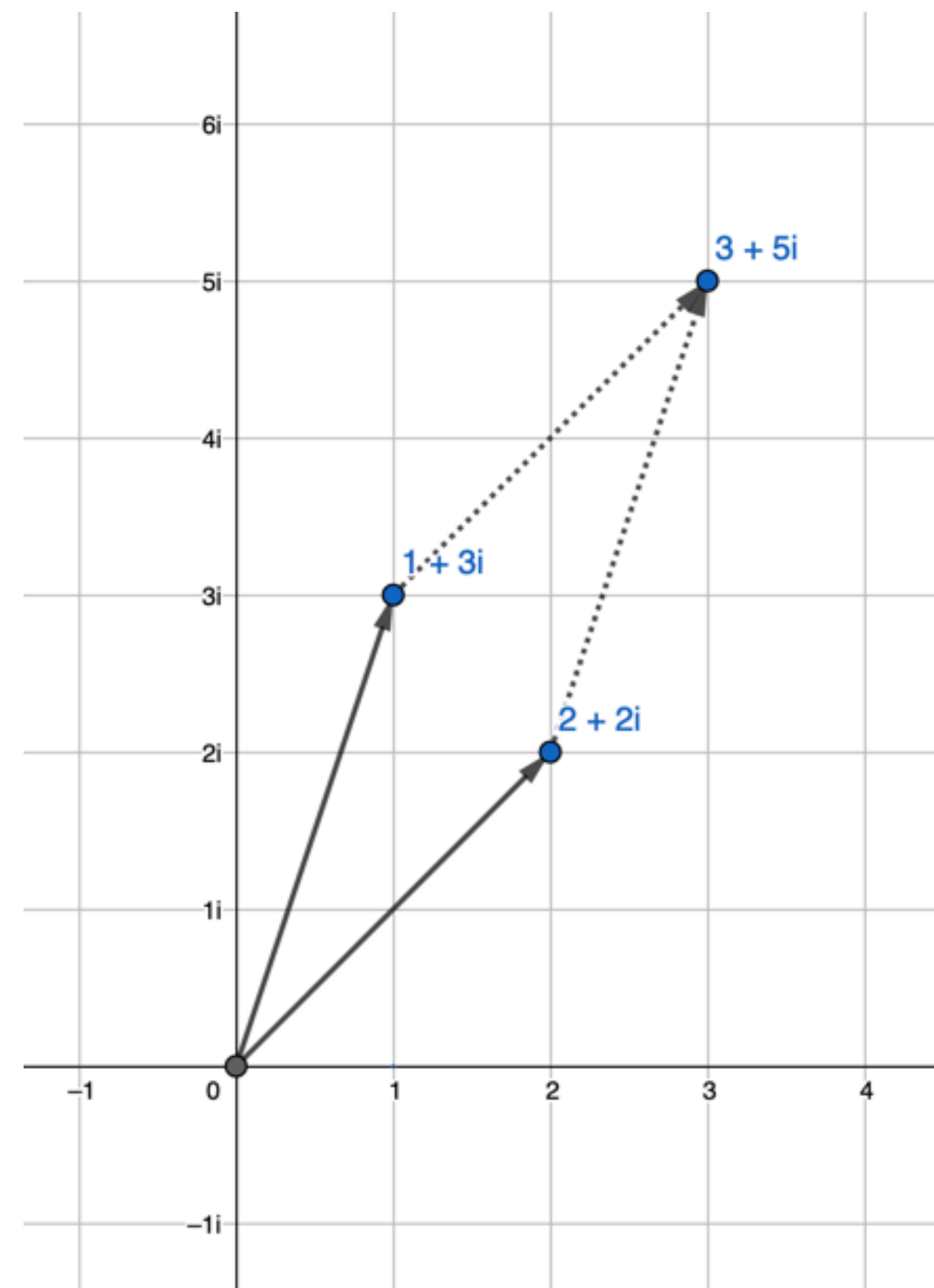
How could someone call this "imaginary." *You are looking right at it*

Geometry with "complex" numbers

They're not really *that* complex

"complex" numbers are numbers with a "real part" and an "imaginary part" like $1 + 4i$ or $2 + 2i$

We can draw them by putting the "real part" on the x-axis and the "imaginary part" on the y-axis... then each number is a "vector" pointing from the origin $(0, 0)$ to some other point



Then adding them is the same as taking one line segment and putting it at the end of the other. wherever you end up is the sum