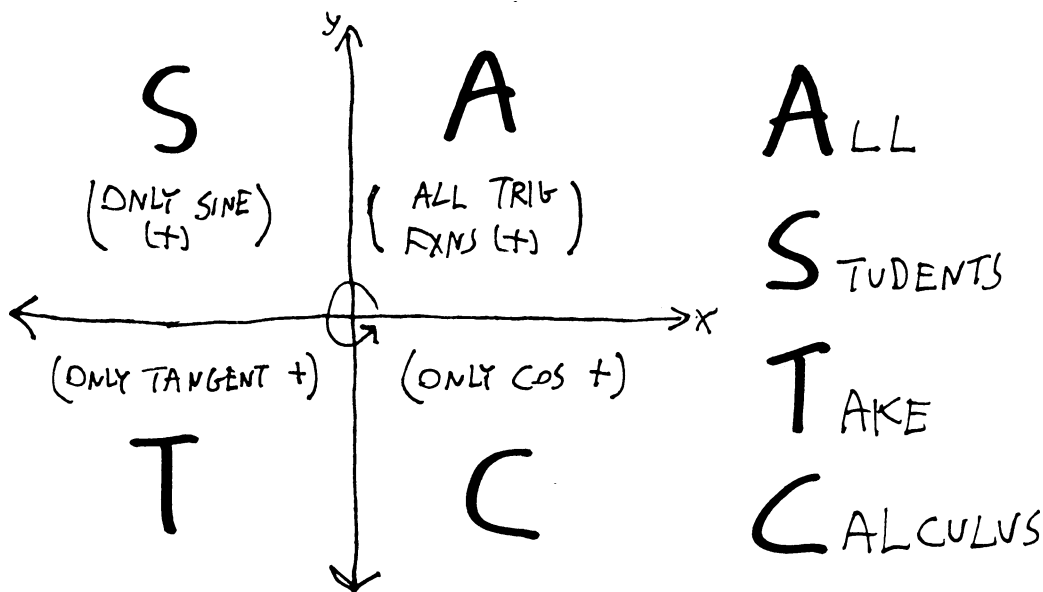


# A Helpful Mnemonic

Pre/Calculus 11, Veritas Prep.

One of the things you have probably noticed while working with our unit-circle definition of trig functions is that the trig functions of angles greater than  $\pi/2$  and less than 0 really aren't all that different than the trig functions of angles between 0 and  $\pi/2$ . The only difference is that sometimes they have a negative sign in front of them. For example,  $\cos(5\pi/4)$  is  $-1/\sqrt{2}$ , which, except for that negative sign, is the same as  $\cos(\pi/4)$  (which is  $+1/\sqrt{2}$ ).

So—in order to make our computation of trig functions go a bit faster (because really, who wants to write out the entire unit circle every time?)—we can make the following helpful generalization, based on our knowledge of the unit circle, and summarize it with a nice mnemonic:



My high school trig teacher, before he moved to Ithaca, had taught in New York City public schools, and as a result, he had a slightly different version of this mnemonic—at his school, students took something else.