

## ASSIGNMENT

Read the last part of section 13.1 for the homework.

- p. 728 5,9,11,13,35,36,41

## TAKE-AWAYS

After reading this section, attending this class and doing this homework you should know

- how to find parameterizations of circles parallel to coordinate planes
- how to find projections on curves onto coordinate planes
- how shifting, stretching and scaling look when you're making parameterizations
- how to plot parameterizations that you don't recognize off the bat
- how parameterizations relate to equations of known shapes (e.g., how the parameterization of a circle  $\langle \cos t, \sin t \rangle$  satisfies  $x^2 + y^2 = 1$ )
- how to identify parameterizations from graphs (e.g, looking at projections, looking at components as  $t \rightarrow \infty$ , etc).

## OTHER STUFF

You might find it useful to use your TI-89 to graph parametric curves in 2-space. Here

[http://education.ti.com/html/t3\\_free\\_courses/calculus89\\_online/mod23/mod23\\_lesson1.html](http://education.ti.com/html/t3_free_courses/calculus89_online/mod23/mod23_lesson1.html)

is one way to do it.

If you're game, you can also program your calculator to graph parametric curves in 3-space. Instructions can be found at

[http://www.brookscoble.com/math\\_d/special\\_features/calclabs/mv4e\\_ti\\_89\\_92/ch04.pdf](http://www.brookscoble.com/math_d/special_features/calclabs/mv4e_ti_89_92/ch04.pdf)