## Mathematics 308 - Fall 1999

## Second homework assignment - due Friday, October 1

1. Reproduce this picture in PostScript (except no labels). Instead, make about 4 versions, tracing in some weak way the course of Euclid's proof. Use colours to highlight ideas.


Be sure that the sides $a$ and $b$ are variables. Demonstrate this by drawing two different cases, one with $a=3, b=4$.
2. And this one:


Here the location of the angle is to be a variable, specified by an angle from the $x$-axis. (Thus, some cases will have the location on the wrong side of the chord.) Again, draw two pictures, one with the vertex at the top of the circle. Color the interior of the angles in your choice of color.
3. Try to show how a proof of Euclid III. 21 goes, using PostScript to draw your pictures.

I will give you some more information in class that will make your task easier.

