

## TI-92 MACRO CONSTRUCTION

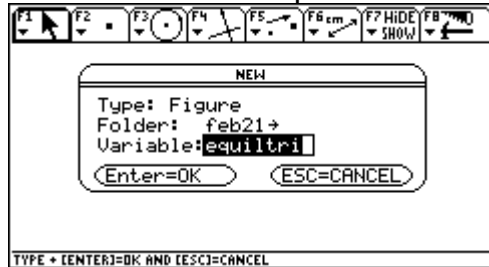
c:\winword\cabri\macrocon.doc 2/20/98

We will construct an equilateral triangle given the length of one side. Then we will create a macro that will do this any time we want.

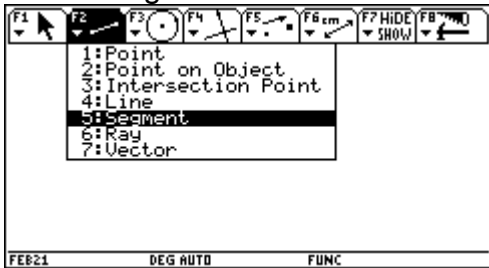
1. First open Geometry using APPS  
8: Geometry 3: New



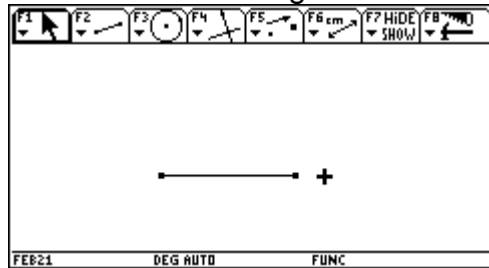
2. Use the folder of choice -- feb21 and the variable equiltri <ENTER> twice



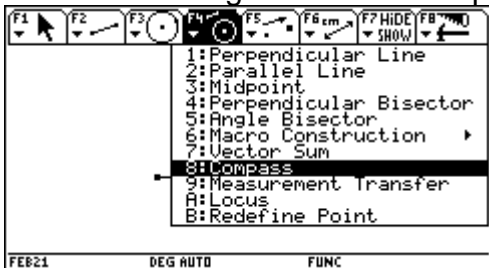
3. Construct any size segment using F2 5: Segment



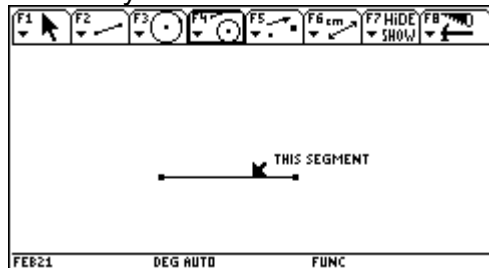
4. Point the "pencil" at a convenient place and construct the segment. Pull away <ESC>



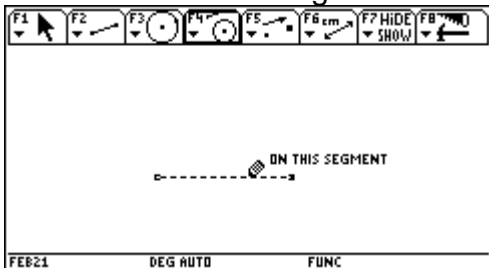
5. Use the compass tool to "copy" the side of the triangle. F4 8: Compass



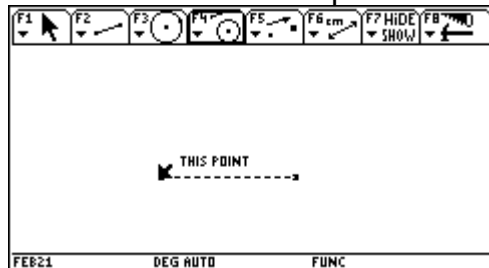
6. First point to the segment to "copy". It will say "THIS SEGMENT" <ENTER>



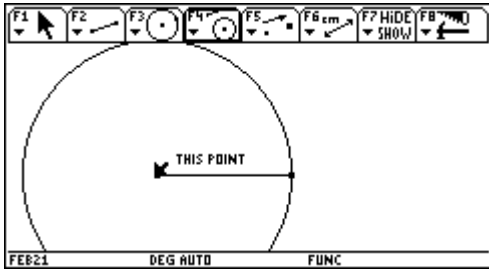
7. <ENTER> The segment is dotted



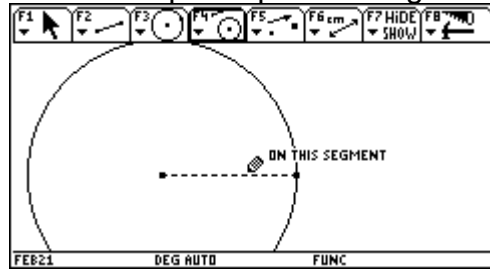
8. Point to the left endpoint -- "THIS POINT"



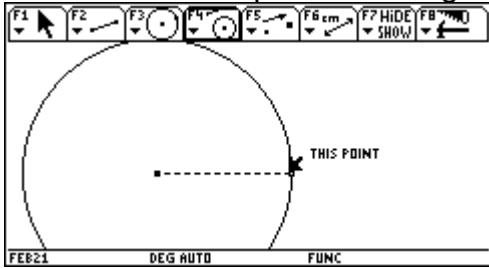
9. A circle is drawn with a compass



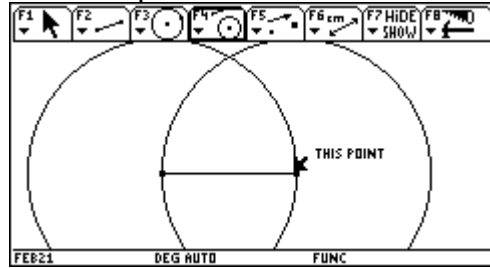
10. Notice that we are still in "compass mode". Repeat: point at segment <ENTER>



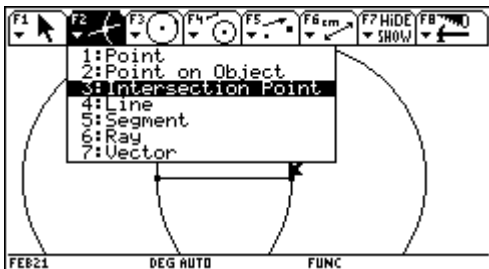
11. But this time point to the right endpoint



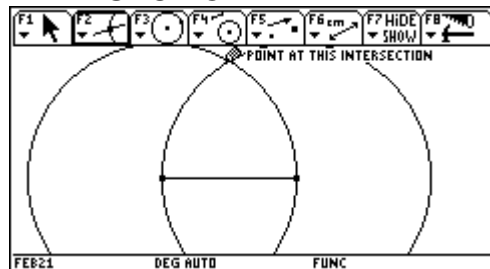
12. And press <ENTER>



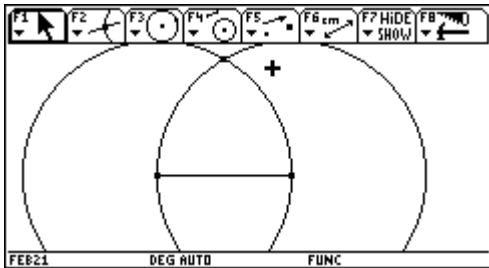
13. We need to mark the point of intersection. F2 3: Intersection Point



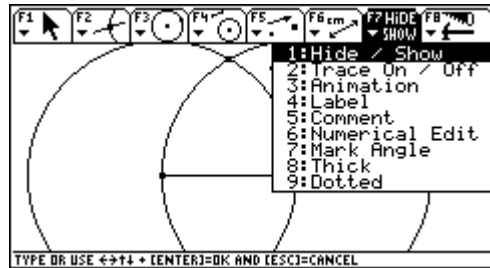
14. Point to the intersection point - and make certain that it says "POINT AT THIS INTERSECTION"



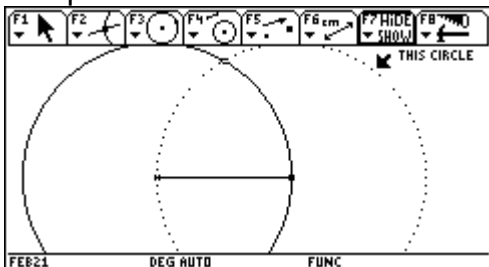
15. Press <ENTER> Pull away <ESC>



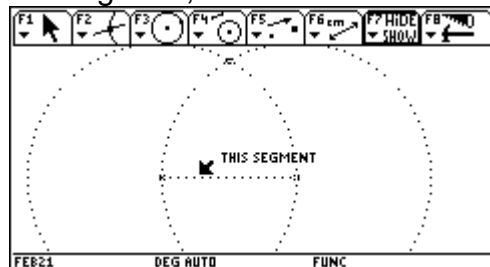
16. Now let's "hide" the parts we don't really want. F7 1: Hide / Show



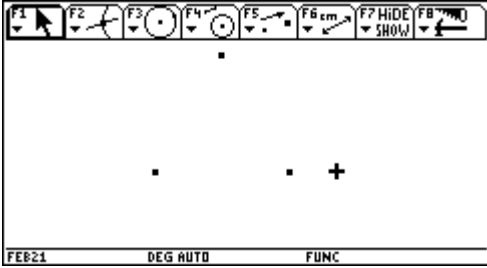
17. <ENTER> Then point to one circle and press <ENTER>. Circle is dotted.



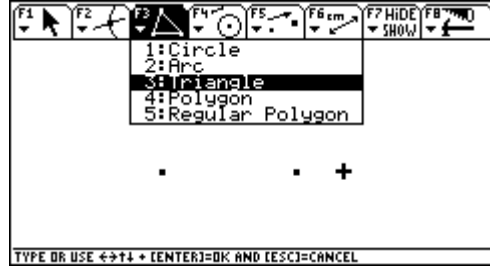
18. Point to other circle, <ENTER>, point to the segment, <ENTER>. Both are dotted.



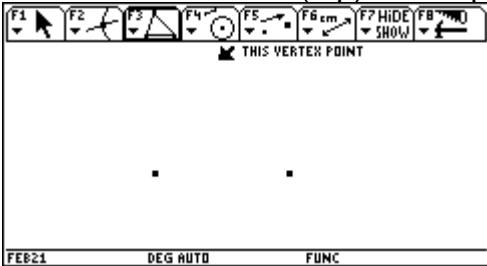
19. Pull away, <ESC>, all that is left are the 3 vertex points of the triangle.



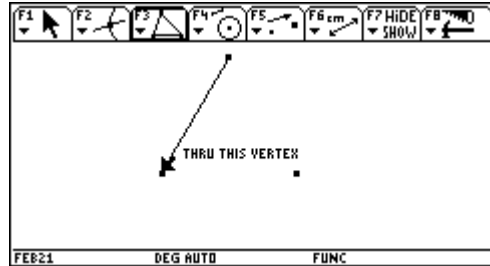
20. Using F3 3: triangle, construct a triangle thru those 3 points



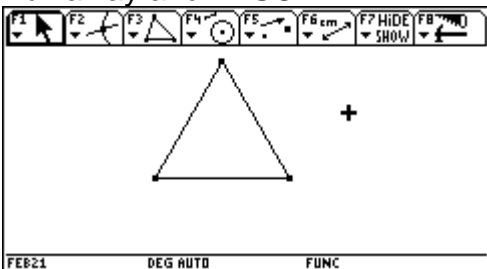
21. Point to the first (top) vertex point



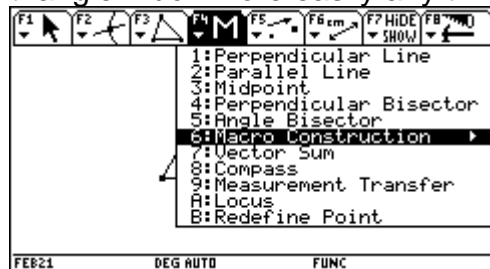
22. <ENTER> then draw to next vertex



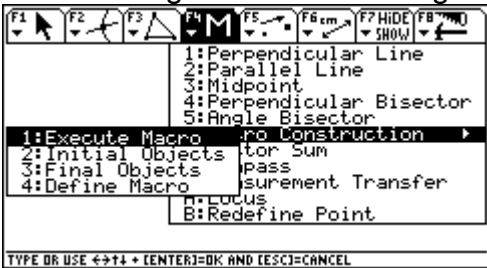
23. <ENTER> and draw to 3rd vertex and <ENTER>. This completes the triangle. Pull away and <ESC>



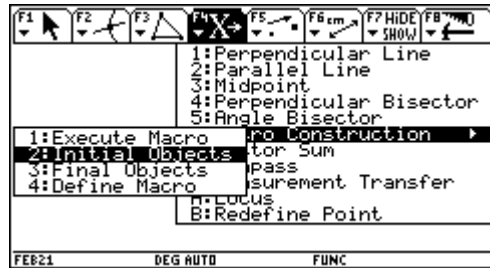
24. Now we are going to create a Macro that will enable us to construct an equilateral triangle much more easily any time. F4 6:



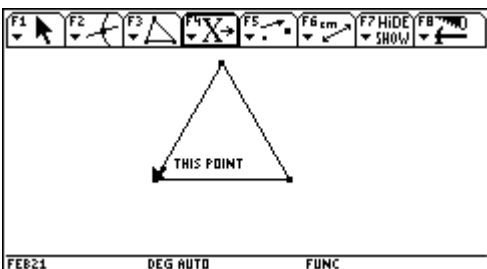
24. Notice the arrow to the right > Press the right cursor once to get submenu



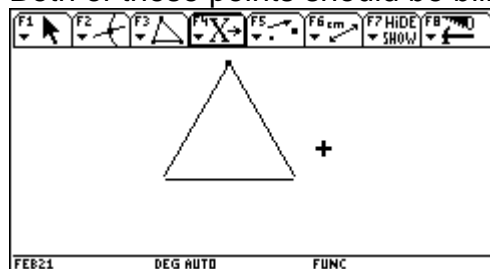
25. Cursor down to 2: Initial Objects



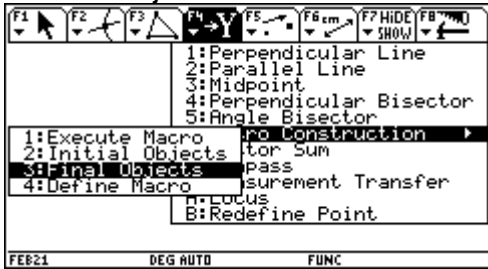
26. <ENTER> and point to the lower left vertex



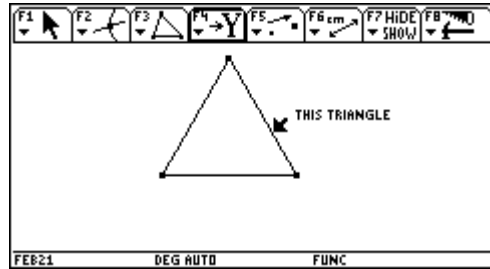
27. <ENTER> and point to the lower right vertex and press <ENTER> again Both of these points should be blinking



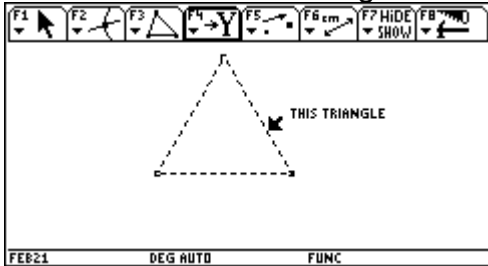
28. F4 6: cursor right  
3:Final Objects



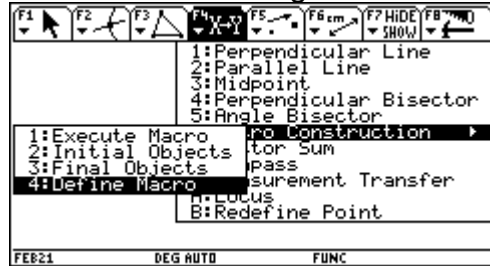
29. <ENTER> and point to  
"THIS TRIANGLE"



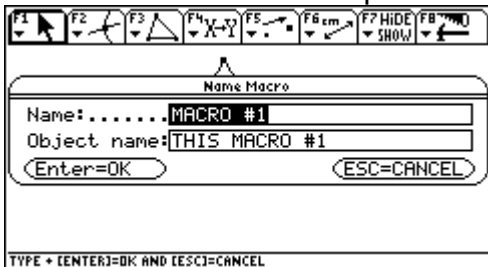
30. <ENTER> and triangle is dotted



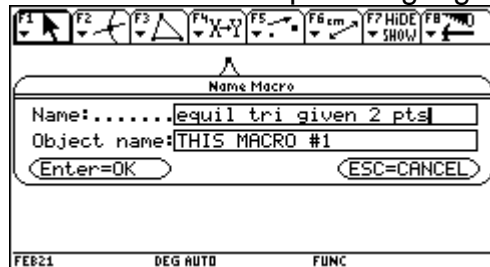
31. F4 6: cursor right 4: Define Macro



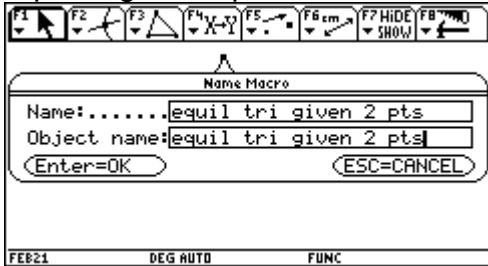
32. This screen comes up



33. For Name: equi triangle given 2 pts



34. Cursor down to Object name:  
equi tri given 2 pts



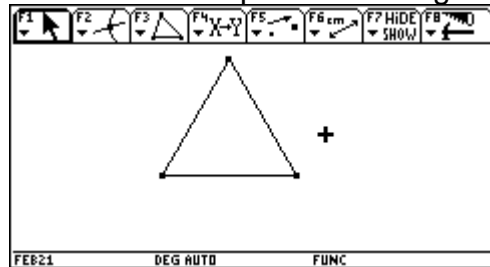
35. <ENTER> once to highlight object name  
<ENTER> a second time to say OK



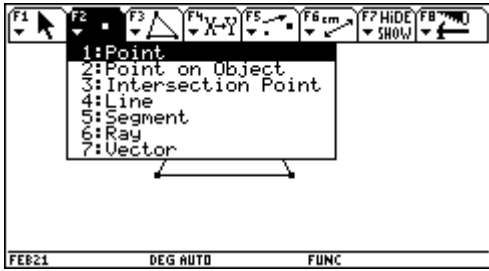
36. Place into Folder of choice (feb21)  
Variable: equitri <ENTER> <ENTER>



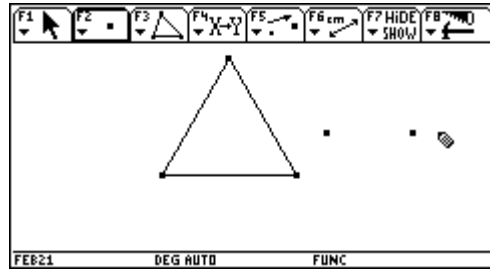
37. You have created a Macro that  
constructs an equilateral triangle.



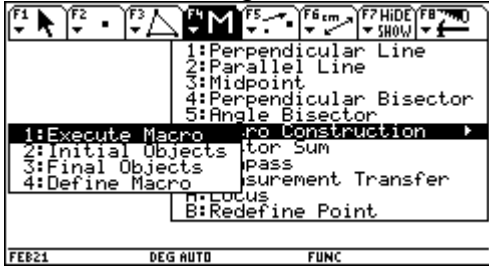
38. Let's try it out. You first need two points on the screen. F2 1: Point



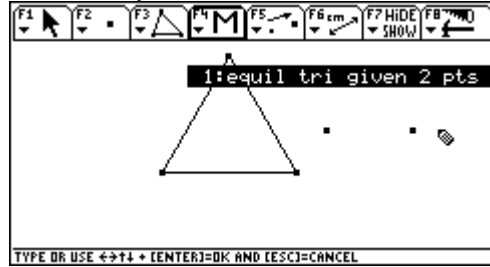
39. Place two points on the screen as shown below:



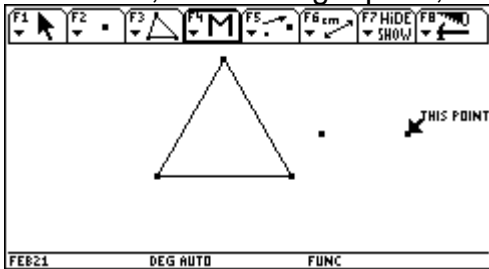
40. To execute the macro: F4 6: cursor right 1: Execute Macro



41. <ENTER> It shows you the name of the macro



42. <ENTER> Point to the left point first, <ENTER>, then the right point, <ENTER>



43. <ENTER> then VOILA!

