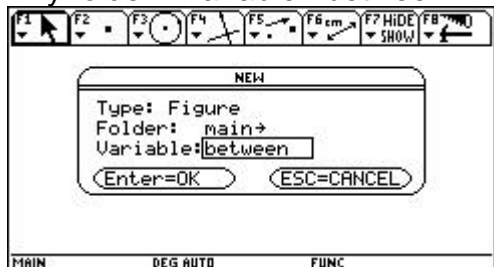


Activity: Betweenness (Segment Addition)

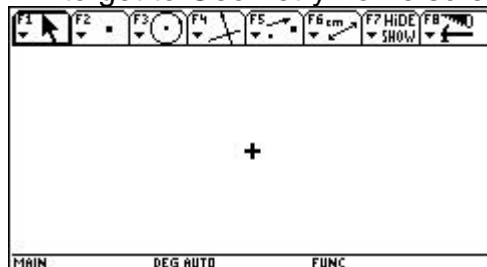
c:\winword\geometry\betwti92.doc 11/97

1. Open APPS Geometry New...

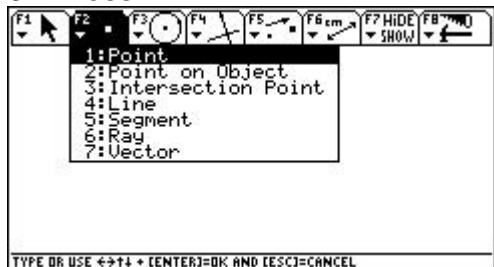
Any folder Variable: between



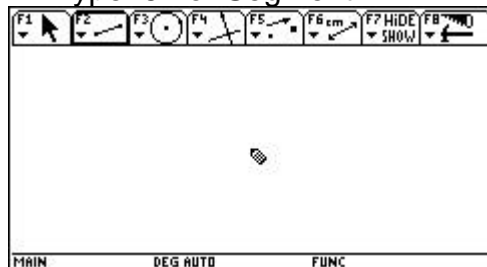
2. Press <Enter> twice to get to Geometry home screen



3. Press F2

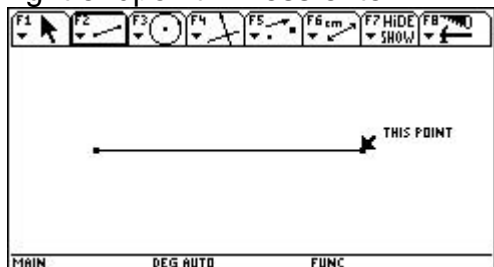


4. Type 5 for Segment

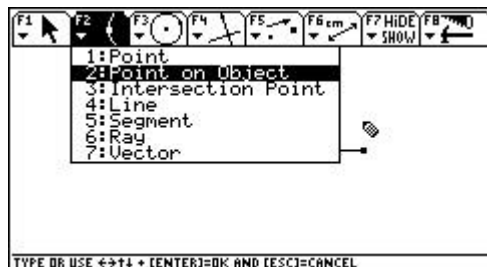


Look at the 'cute' pencil you get!

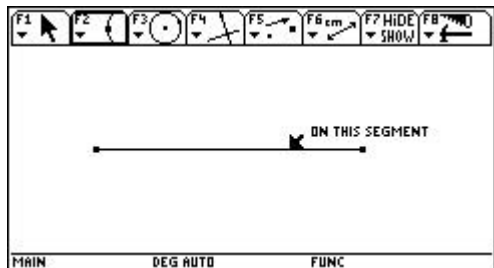
5. Position your pencil where you would like the left endpoint. Press enter. Then cursor to the right to where you want the right endpoint. Press enter.



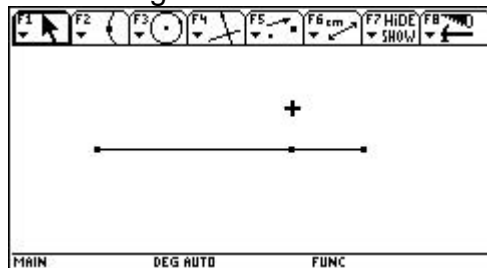
6. Press F2 then 2 for Point on Object



7. You will still have a pencil. Move the cursor to somewhere on the segment and the response on the screen says "ON THIS SEGMENT".

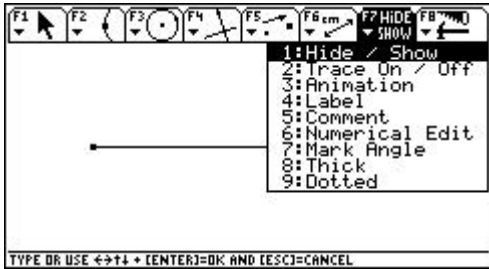


8. Press <Enter>. Press the up arrow on cursor to "pull away" from the segment. Then press <ESC>. The cursor becomes a + sign.

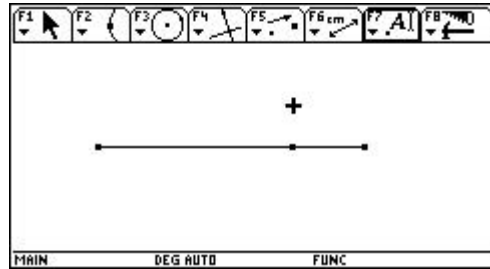


9. To LABEL points:

Press F7

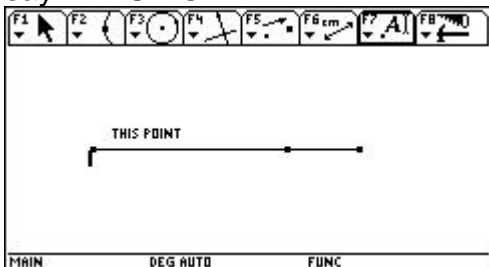


10. Type 4 for Label

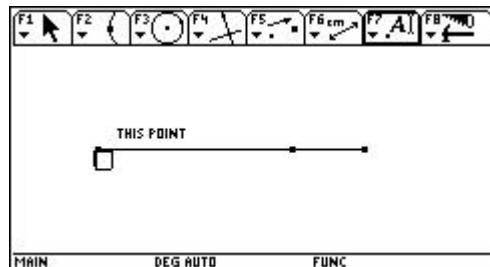


Notice that the F7 box is highlighted.

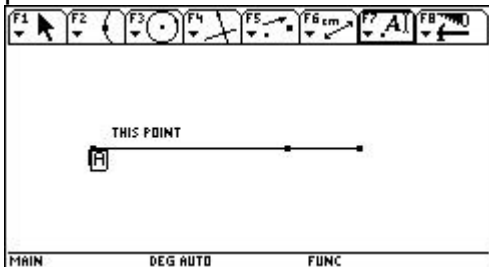
11. Move your cursor until it is at the left most endpoint. The message must say "THIS POINT".



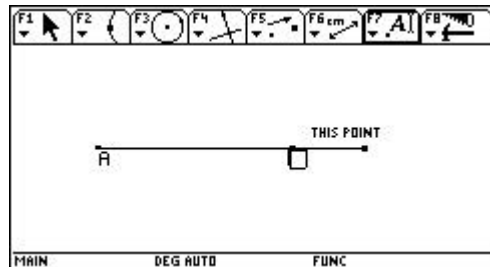
12. Press <Enter>.



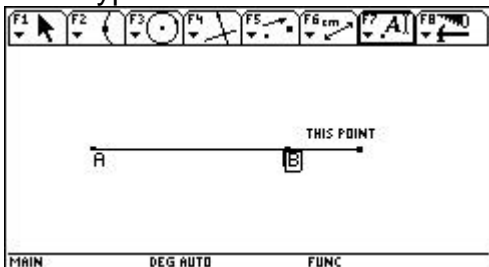
13. Press the white up arrow key \uparrow and then A to get a capital A. Then press <Enter>.



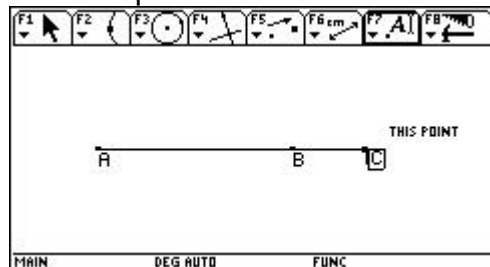
14. Move the cursor to the point between the the other 2 until the message says "THIS POINT". Press <Enter>.



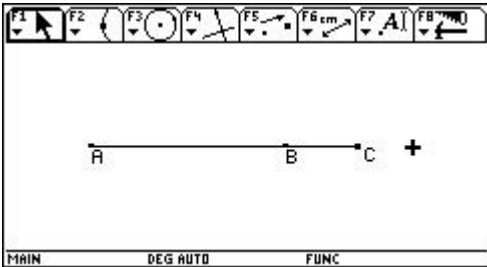
15. Type \uparrow B to call that point B. Then type enter.



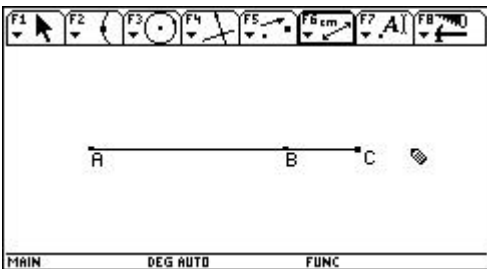
16. Proceed to the other endpoint and label that point C.



17. Move the cursor to the right and press <ESC> to disengage the label maker.

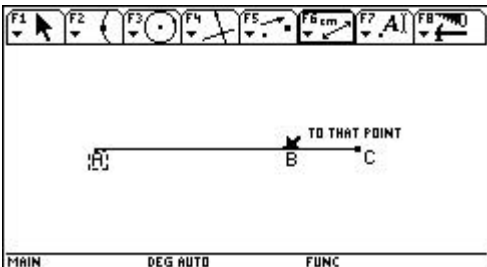


19. Type 1 for Distance & Length
You will get a pencil again.

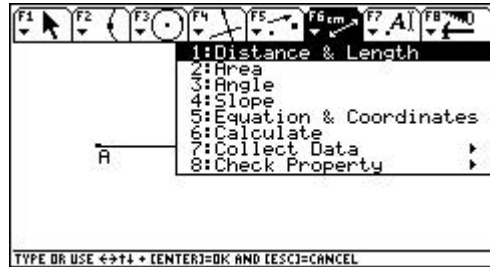


but notice that the F6 box is highlighted.

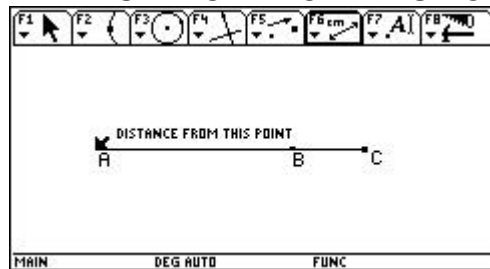
21. Press <Enter> and then move the cursor to point B. The message must say "TO THAT POINT"



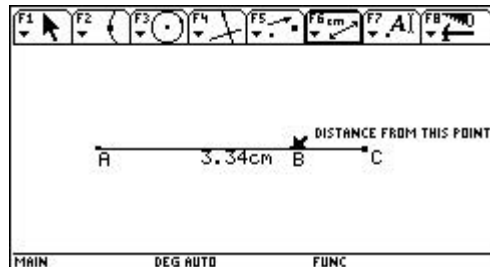
18. We are now ready to measure the lengths of the 3 segments. Press F6.



20. To measure the length of a segment, move your cursor to first endpoint (A) ***make sure that the message is "DISTANCE FROM THIS POINT"

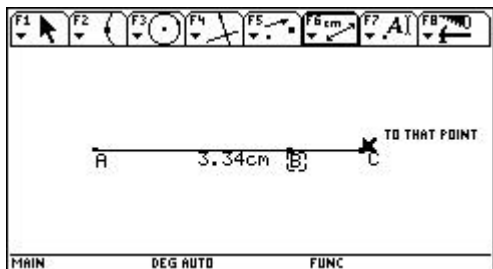


22. Press <Enter>. The length of the segment appears somewhere on the screen.

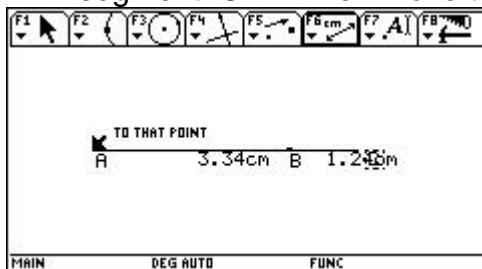


Notice that the cursor is ready to find another distance.

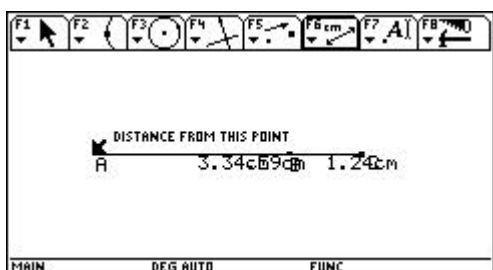
23. Press <Enter> to start to find the length of segment BC. Then move the cursor to point C and press <Enter> when it says "TO THAT POINT"



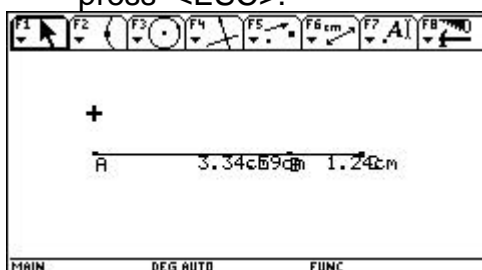
24. The length of segment BC shows up. Again notice that the cursor is still ready to measure another length. So press <Enter> to start measuring segment CA. Then move to point A.



25. Press <Enter>

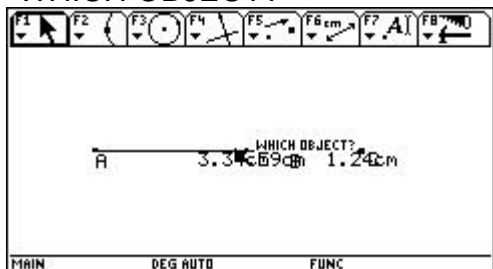


26. First pull cursor up and away and then press <ESC>.

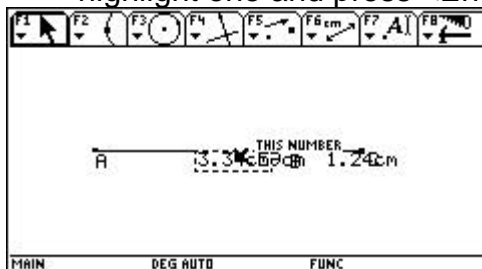


CONFUSING!!! WHAT TO DO?

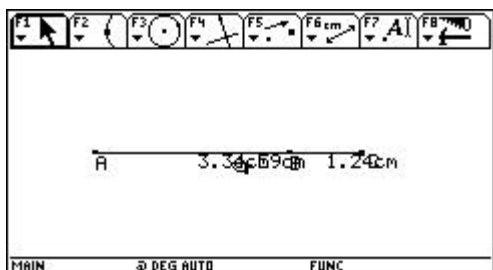
27. Move cursor to the confusing numbers until the message is "WHICH OBJECT?"



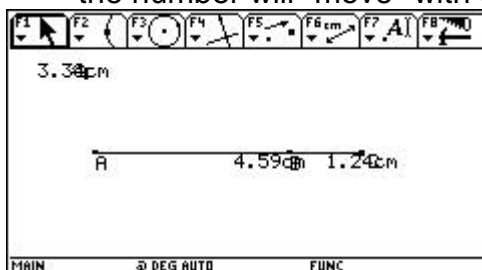
28. Press <Enter>. It will illustrate the two numbers. Use the cursor to highlight one and press <Enter>



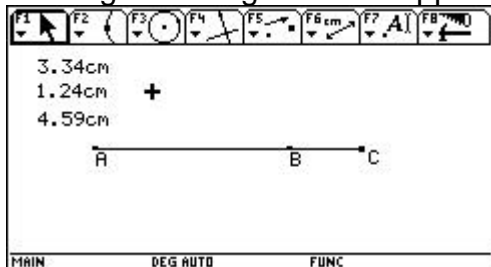
29. Using your left thumb, hold down the "fist" in the upper left corner of the TI-92. A fist appears on the screen.



30. Continue to hold down the fist with your left thumb, and simultaneously move the cursor up and to the left. Be patient and the number will "move" with the cursor.



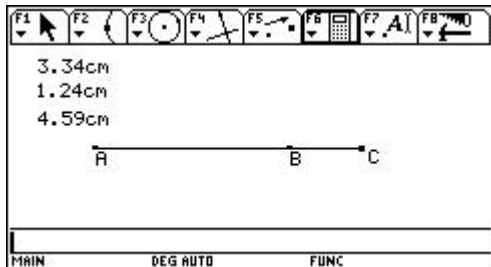
31. In similar fashion, get the other two segment lengths in the upper left corner



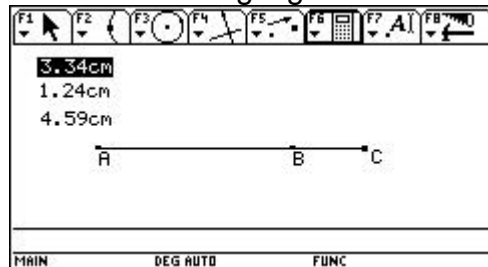
32. Now to calculate the sum of the lengths of AB and BC. Press F6. Then 6.



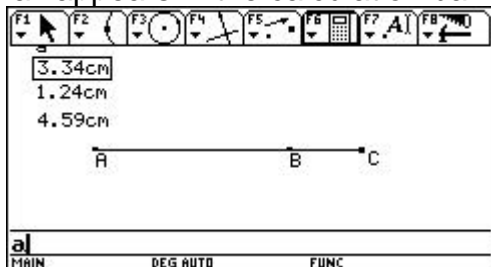
33. Notice the new horizontal calculation bar at the bottom of the screen.



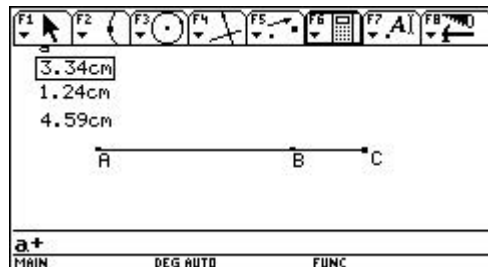
34. Move the up cursor arrow until the length of AB is highlighted.



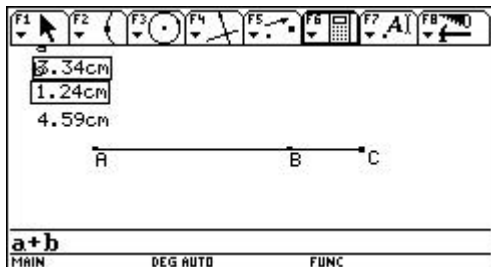
35. Press <Enter>. A lower case 'a' appears in the calculation bar.



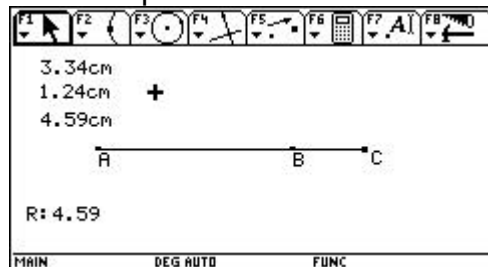
36. Type a '+' sign.



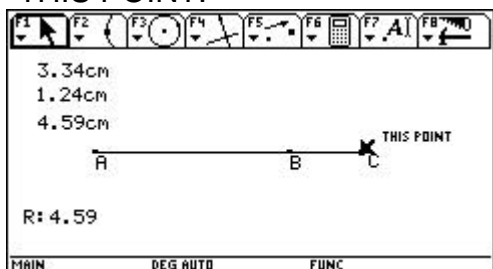
37. Press the up cursor arrow until the length of BC is highlighted. Press <Enter>. It calls it 'b'.



38. Press <Enter>. It gives you the result in the form of 'R: ' Notice how it compares to AC. Press <ESC>.

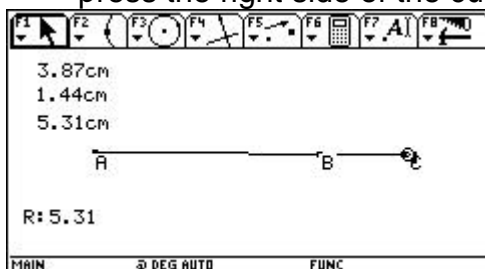


39. Now for the fun!!! Place the cursor on point C until the message is "THIS POINT."

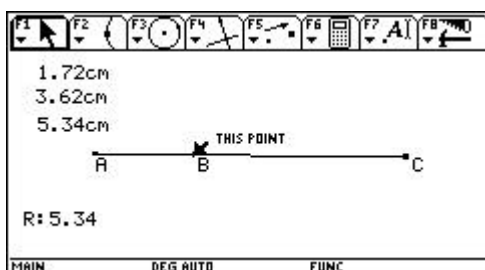


41. Notice how the lengths are updated as the segment is "stretched." Also notice the length of AC and the result R: are the same.

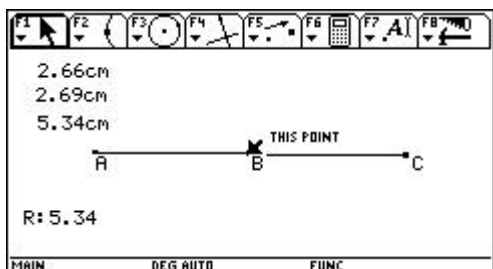
40. With your left thumb, depress the fist and hold it down simultaneously while you press the right side of the cursor pad.



42. Do the same procedure (steps 39 & 40) but with point B instead.

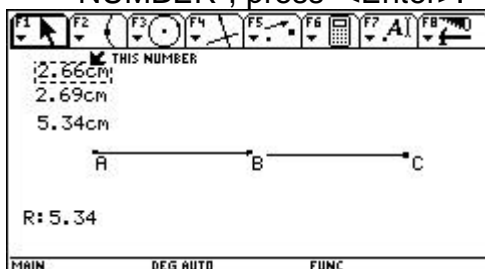


43. Try to get B to be as close to the midpoint as possible.

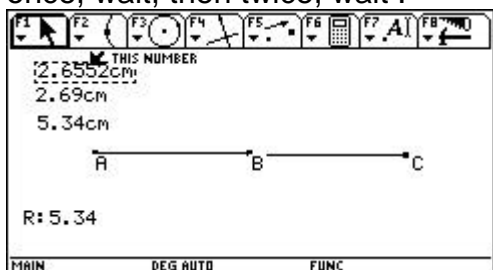


This was as close as I could get.

44. To change the number of significant digits. Move your cursor to one of the lengths. When the message is "THIS NUMBER", press <Enter>.

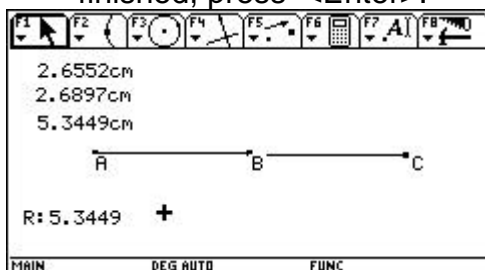


45. With the highlighted number in "marquee", press the '+' sign once, wait, then twice, wait.



Now your length is measured to 4 places to the right of the decimal point.

46. Continue the same process for the other three numbers on the screen. When finished, press <Enter>.



Note that using the minus sign will display fewer significant digits.