Problem 18, Chemistry 301X- 2006

In each part, make a good three-dimensional drawing, and determine (little arrows, please) how many different carbons there are in each compound.

(a) Draw a compound of the formula C_8H_{14} containing ONLY two four-membered rings.

(b) Draw a compound of the formula C_7H_{12} containing ONLY two four-membered rings.

(c) Draw a compound of the formula C_6H_{10} containing two four-membered rings.

(d) Draw a compound of the formula C_5H_8 containing ONLY four-membered rings.

(e) Draw a compound of the formula C_8H_8 containing six four-membered rings.

(f) Draw a compound of the formula C_8H_{16} containing ONLY two four-membered rings. Really tough. The other parts are relatively easy, but this one will tax your imagination. Be creative. Think non-linear.

 "Do not be chained to what you have already seen", he hinted.