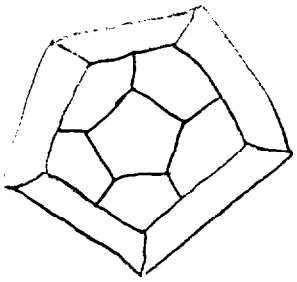
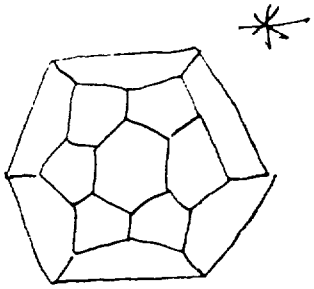
The 5-5-connected graphs

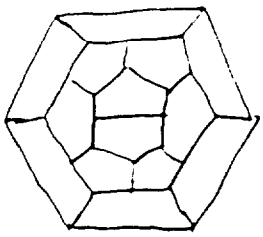
DODECAHEDRON



20-1



24-1



26-1

(12, 3)

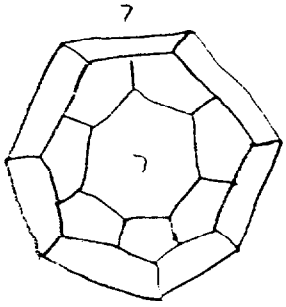
Barnette

Personal memo from
JOSHUA LEDERBERG

Rick Smalley.

SEP 23 1991

Some simply cages



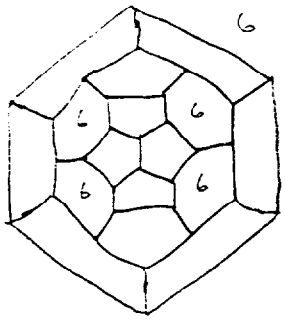
28-3

(14, 0, 2)

Dear Rick

The enclosed graphs are simply 5-connected polyhedra enumerated by Prof. David Barnette at UC/Davis. He had not heard of buckyballs until I wrote him just now!

It would be interesting to see if any of these "compute" as geometric polyhedra buildable with C atoms (+H). Do you have facilities to test that? Have you already done? I have marked a few as special *. They don't have symmetry of C_{60} and probably won't conjugate —=— ...



30-3

(12, 5)

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(D. Barnette)