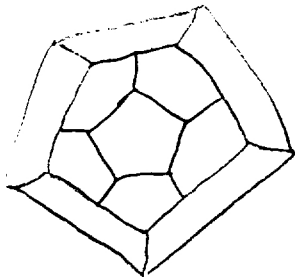
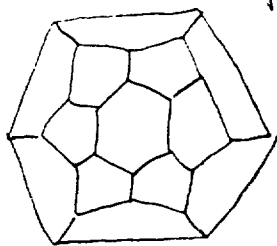


DODECAHEDRON

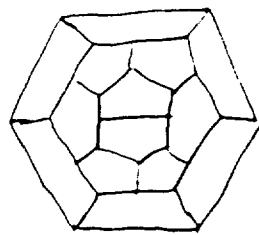
The 5-connected graphs



20-1

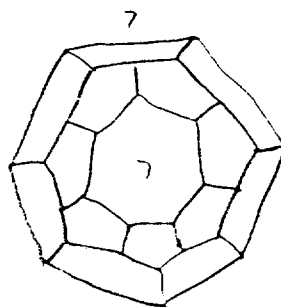


24-1



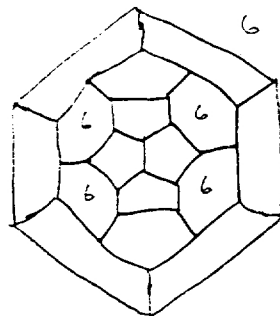
26-1

(12, 3)



28-2

(14, 0, 2)



30-3

(12, 5)

Barnette ↓

(17, 1) → 4/2 = 1/2

Personal memo from
JOSHUA LEDERBERG

Rich Smalley.

SEP 23 1991

Some simple cages

Dear Rich

The enclosed graphs are simple
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 "cages" as geo-
metric polyhedra buildable with
(+H)

C atoms. Do you have facilities
to test that? I have marked a
few as special *. They don't
have symmetry of C_{50}
and probably won't
conjugate --- ...

(D. Barnette)