(1) Consider the graph shown on the right.
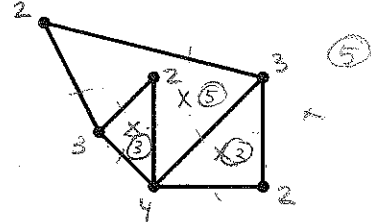   (a) List **v**, **e**, **c**, and **f** for this graph.

   $v = 6 \quad e = 8 \quad c = 1 \quad f = 4$

   (b) What is the degree list of the vertices?
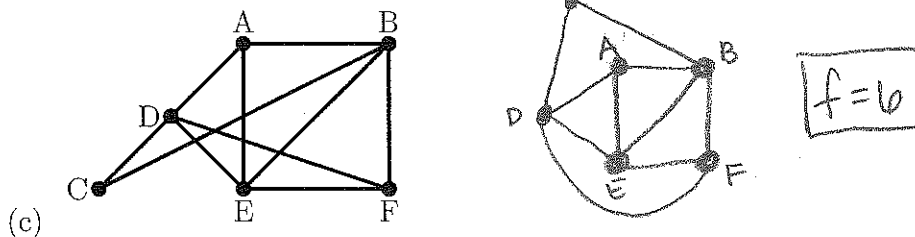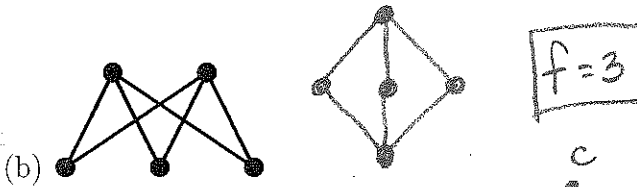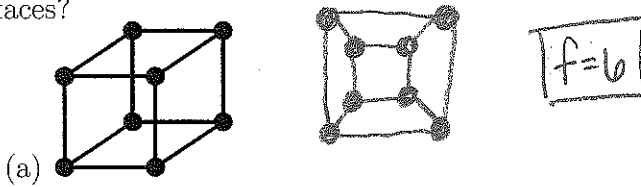
   $2, 2, 2, 3, 3, 4$

   (c) What is the degree of each face?

   $3, 3, 5, 5$

(2) Here are a couple more graphs that don't look planar at first. Can you count the faces?

   (a) $f = 6$

   (b) $f = 3$

   (c)

   A   B
   D
   C   E   F

   $f = 6$

(3) For each graph above, find the number of vertices, edges and faces.

	Graph a	Graph b	Graph c
Vertices v	8	5	6
Edges e	12	6	10
Faces f	6	3	6

(4) From the information in your table above, Fill in the blank to determine the result of Euler's formula.

Theorem (Euler's Formula). *Take any connected planar graph drawn with no intersecting edges. Let* **v** *be the number of vertices in the graph,* **e** *be the number of edges in the graph, and* **f** *be the number of faces in the graph. Then*

$$v - e + f = \underline{\quad 2 \quad}$$