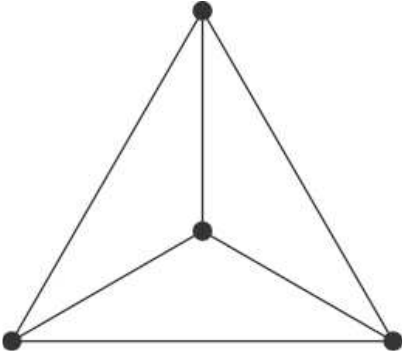
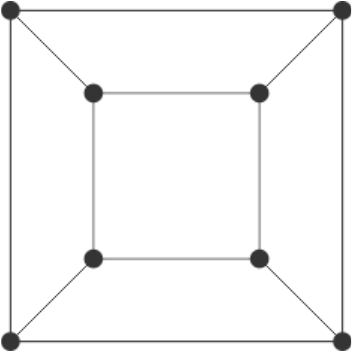
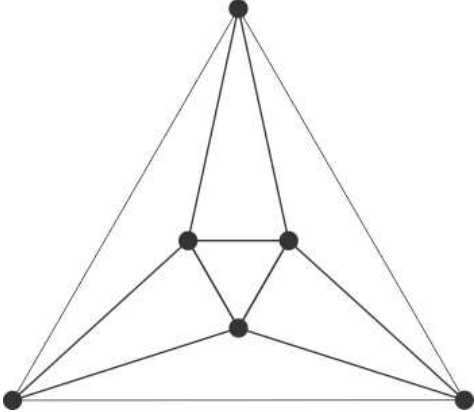
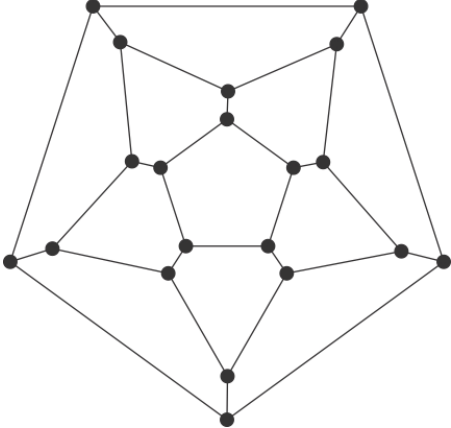
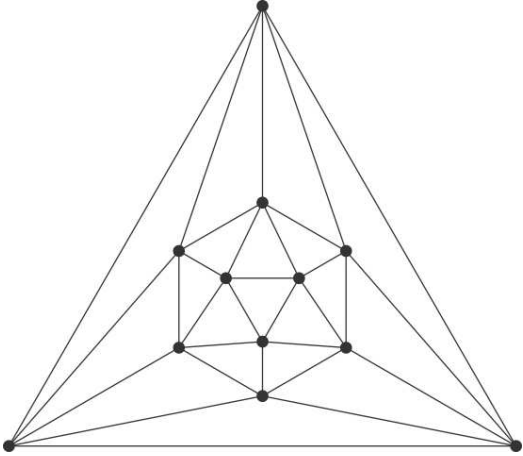


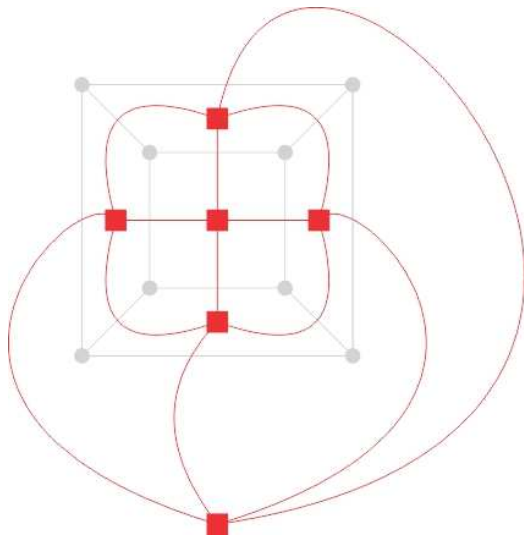
Ata dos exercícios 6.1.12 e 6.1.13
Juliana Medeiros Destro - 18 de maio de 2012

6.1.12 Draw the five regular polyhedra as planar graphs. Show that the octahedron is the dual of the cube and the icosahedron is the dual of the dodecahedron.

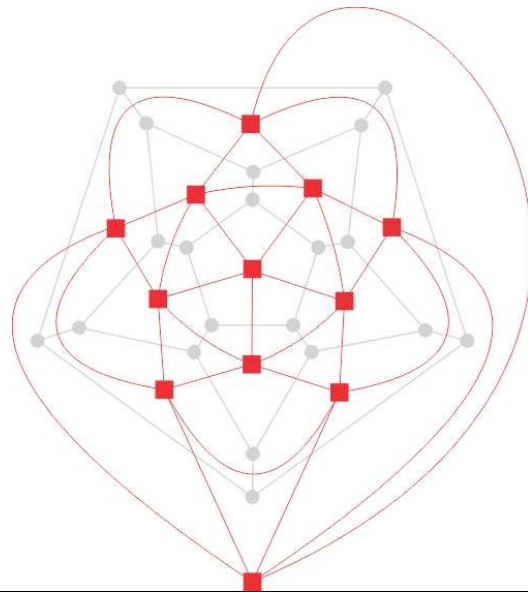
Segue abaixo uma imersão planar dos 5 poliedros regulares:

<p>Tetraedro (4 vértices, 6 arestas, 4 faces)</p>  <p>A planar graph representation of a tetrahedron, consisting of 4 vertices and 6 edges. It is drawn as a large outer triangle with a fourth vertex at its center, connected to each of the three outer vertices.</p>	<p>Cubo (8 vértices, 12 arestas, 6 faces)</p>  <p>A planar graph representation of a cube, consisting of 8 vertices and 12 edges. It is drawn as an outer square with an inner square, and corresponding vertices of the two squares are connected by edges.</p>
<p>Octaedro (6 vértices, 12 arestas, 8 faces)</p>  <p>A planar graph representation of an octahedron, consisting of 6 vertices and 12 edges. It is drawn as an outer triangle with an inner triangle, and corresponding vertices of the two triangles are connected by edges.</p>	<p>Dodecaedro (20 vértices, 30 arestas, 12 faces)</p>  <p>A planar graph representation of a dodecahedron, consisting of 20 vertices and 30 edges. It is drawn as a complex planar graph with 12 faces, each being a pentagon.</p>
<p>Icosaedro (12 vértices, 30 arestas, 20 faces)</p>  <p>A planar graph representation of an icosahedron, consisting of 12 vertices and 30 edges. It is drawn as a complex planar graph with 20 faces, each being a triangle.</p>	

Octaedro como dual do cubo

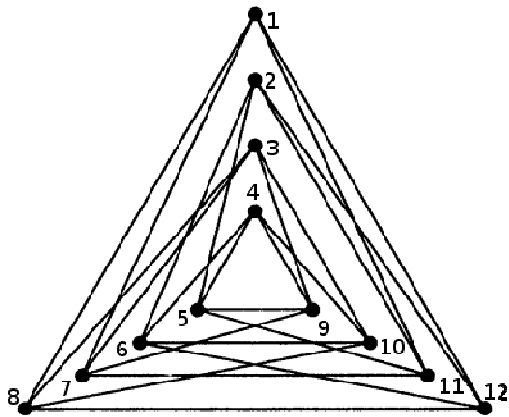


Icosaedro como dual do dodecaedro

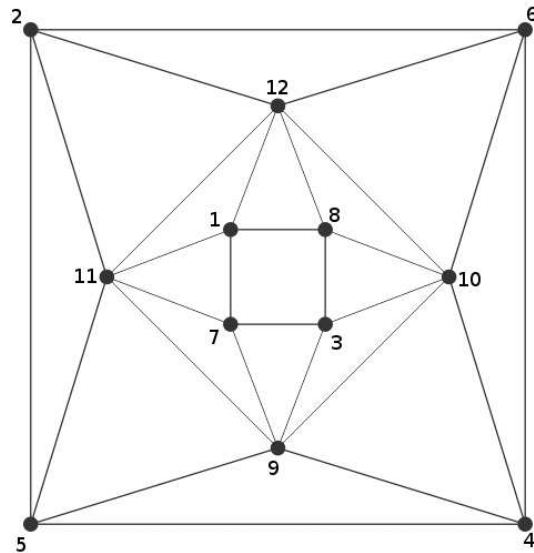


6.1.13 Find a planar embedding of the graph below

Grafo original:



Imersão planar:



A relação de isomorfismo é demonstrada pelos *labels* dos vértices