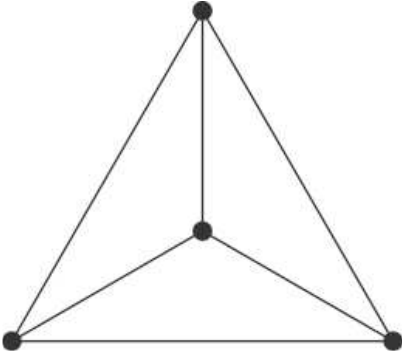
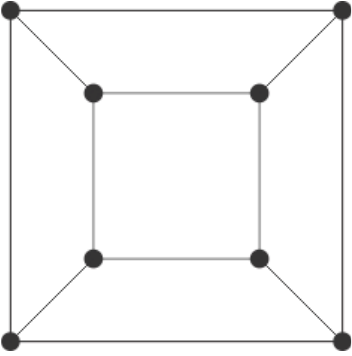
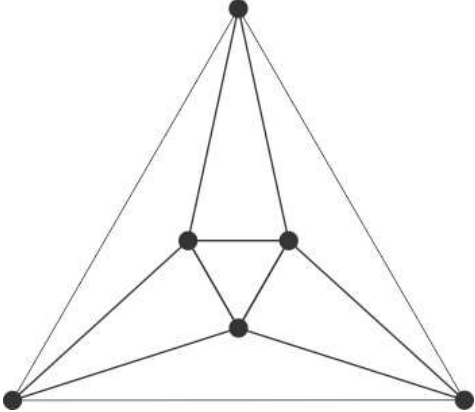
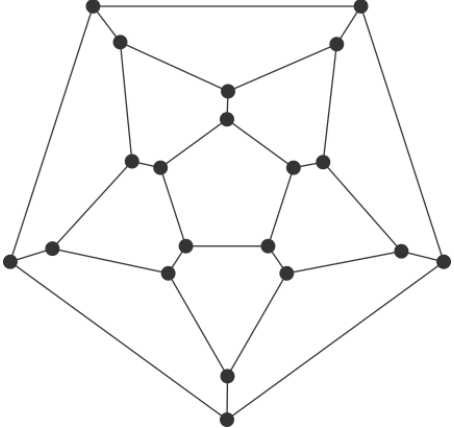
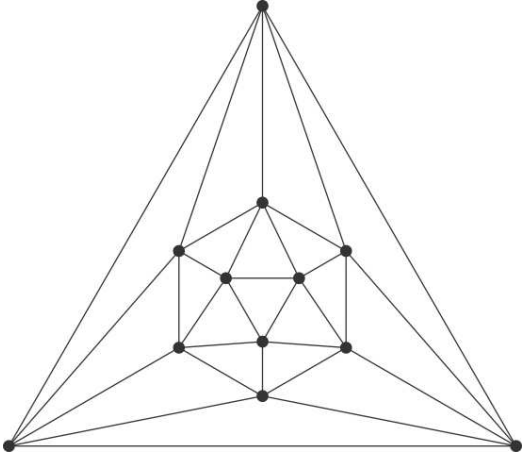


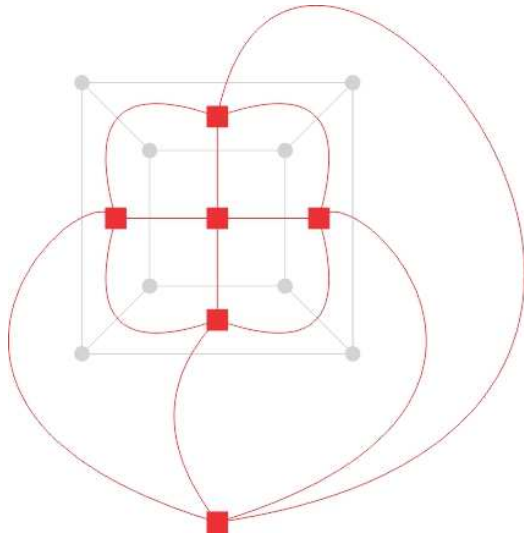
Ata dos exercícios 6.1.12 e 6.1.13
Juliana Medeiros Destro - 18 de maio de 2012

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.

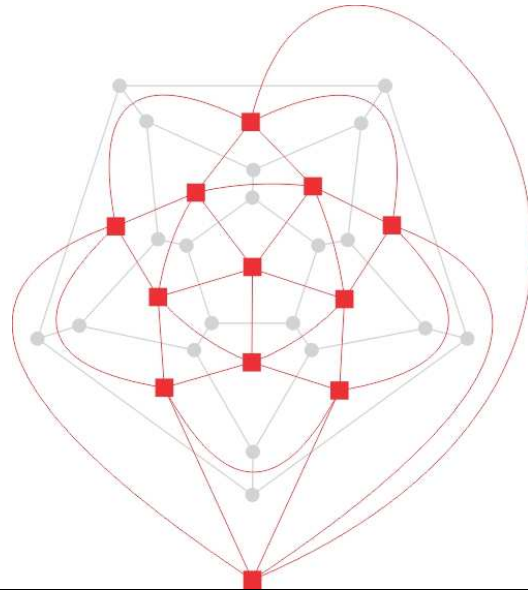
Segue abaixo uma imersão planar dos 5 poliedros regulares:

<p>Tetraedro (4 vértices, 6 arestas, 4 faces)</p>  <p>A planar graph representation of a tetrahedron with 4 vertices and 6 edges. It consists of an outer triangle and a central vertex connected to each of the three vertices of the triangle.</p>	<p>Cubo (8 vértices, 12 arestas, 6 faces)</p>  <p>A planar graph representation of a cube with 8 vertices and 12 edges. It consists of an outer square, an inner square, and corresponding vertices of the two squares connected by edges.</p>
<p>Octaedro (6 vértices, 12 arestas, 8 faces)</p>  <p>A planar graph representation of an octahedron with 6 vertices and 12 edges. It consists of an outer triangle, an inner triangle, and corresponding vertices of the two triangles connected by edges.</p>	<p>Dodecaedro (20 vértices, 30 arestas, 12 faces)</p>  <p>A planar graph representation of a dodecahedron with 20 vertices and 30 edges. It consists of an outer pentagon, an inner pentagon, and two intermediate layers of vertices connected in a complex pattern.</p>
<p>Icosaedro (12 vértices, 30 arestas, 20 faces)</p>  <p>A planar graph representation of an icosahedron with 12 vertices and 30 edges. It consists of an outer triangle, an inner triangle, and two intermediate layers of vertices connected in a complex pattern.</p>	

Octaedro como dual do cubo

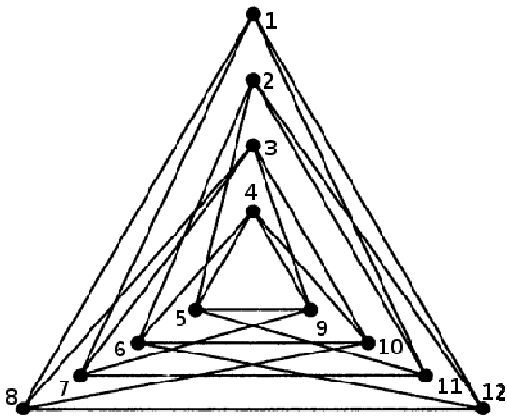


Icosaedro como dual do dodecaedro

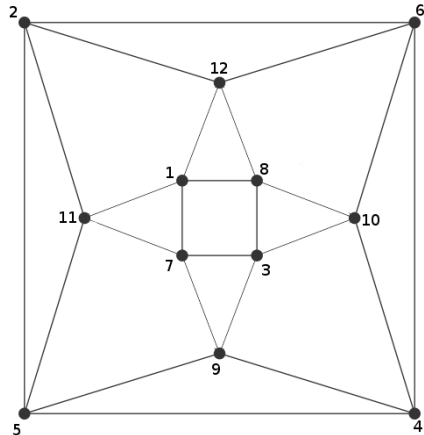


6.1.13 Find a planar embedding of the graph below

Grafo original:



Imersão planar:



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