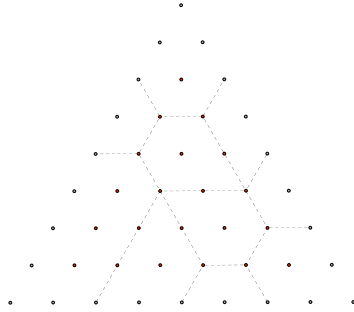
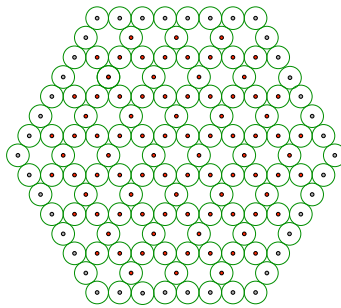


Math 7620, Problem Set 5, Due 2009

1. The following is a picture of a spider web. The nodes on the outside of the big triangle are pinned. A triangular lattice is indicated just for reference. The lattice vertices off the web are not part of the configuration. Is this spider web rigid? Does it have a proper non-zero equilibrium stress?



2. The following is a picture of a packing of congruent disks in the plane, where the disks on the boundary are pinned. Show that the other disks are rigid.



3. The six dark blue hexagons are fixed, and the yellow hexagons are allowed to move. Can they move as rigid bodies?

