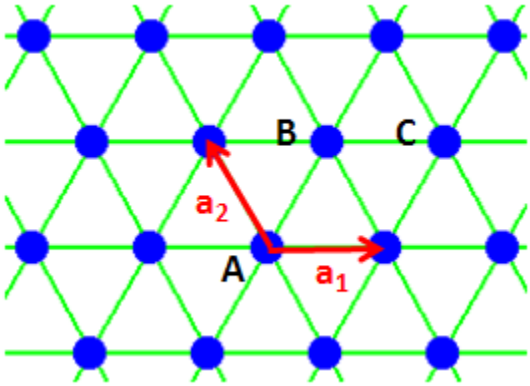
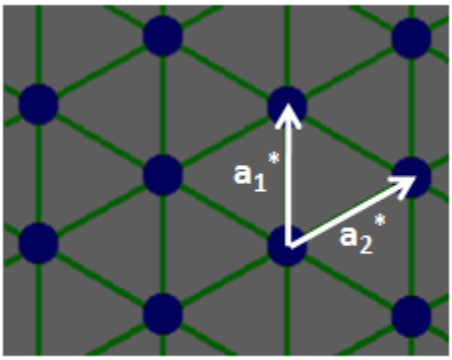
Phys 231, Fall 2007, Quiz 2, Oct 8

Your name:





A two-dimensional hexagonal Bravais Lattice is shown above, in position space (left) and in wave vector space (right). Consider a lattice "plane" (line, in fact) P1, containing lattice points A,B and a lattice "plane" P2, containing lattice points A,C. For each lattice plane, (1) indicate all members of the family of lattice planes, (2) obtain Miller indices using the conventional "intercept method," and (3) indicate the non-zero shortest reciprocal wave vector **K** that is perpendicular to lattice planes.