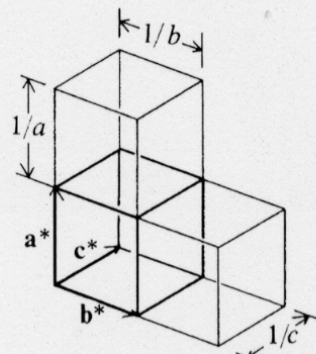
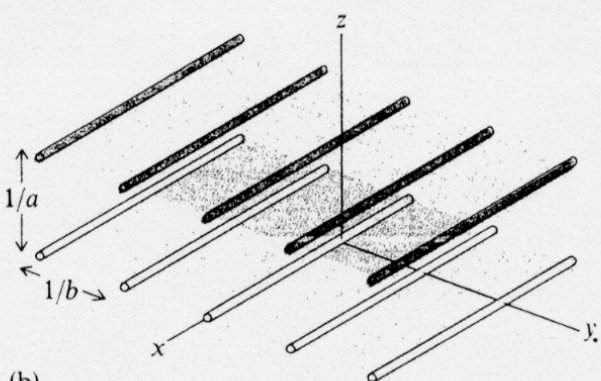
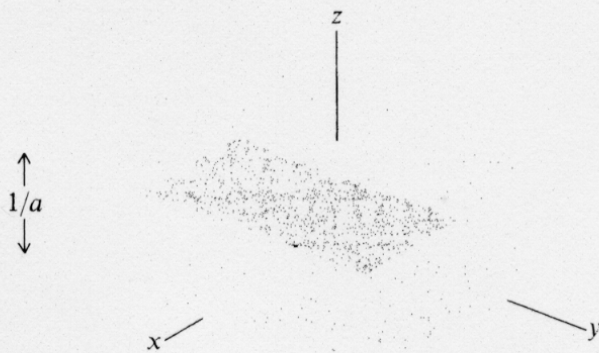


(a)



(c)



(b)

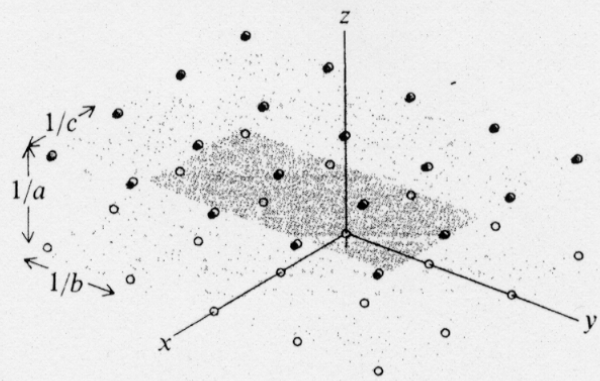


Figure 13-12

Three-dimensional arrays. (a) Vectors \mathbf{a} , \mathbf{b} , and \mathbf{c} define the array. (b) Scattering planes resulting from each one-dimensional periodicity intersect to give lines for each two-dimensional periodicity and points for each three-dimensional periodicity. The array of points that results is the reciprocal lattice.

(c) The reciprocal lattice is generated by the vectors \mathbf{a}^* , \mathbf{b}^* , and \mathbf{c}^* . Several cells of the reciprocal lattice are shown. Scattering vectors extending from the origin to these points result in observed intensity.