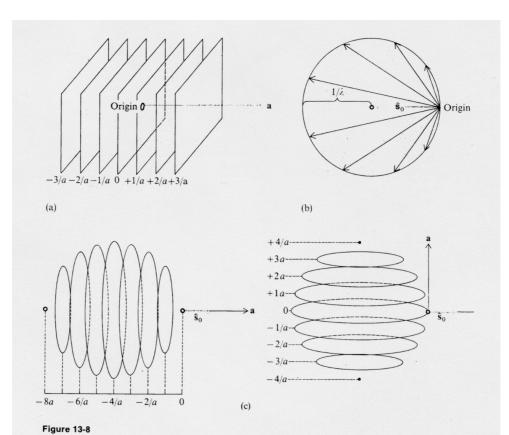


The von Laue scattering conditions for a one-dimensional array. Scattering vectors are shown as solid arrows. (a) For  $\mathbf{S} \cdot \mathbf{a} = 0$ . (b) For  $\mathbf{S} \cdot \mathbf{a} = 1$ .



Experimental conditions for observation of scattering from the linear array of atoms shown in Figure 13-6. (a) A set of parallel planes, representing the von Laue condition imposed by the array of atoms. (b) For a fixed direction  $\hat{s}_0$  of incident x rays, the possible scattering vectors (black) must lie on the surface of the sphere. (See Fig. 13-3a for further information.) (c) The intersection of the two sets of conditions outlined in parts a and b is shown for two different relative geometries of a and  $\hat{s}_0$ .