

### Problem 7.5

- (a) Define a slip system. A slip system consists in a set of parallel crystalline planes, and a direction lying in these planes. Plastic deformation consists of relative displacements of these planes in these directions. Usually, the most closely packed planes and the most closely packed directions form the slip system that dominates the plastic behavior.
- (b) Not all metals have the same slip systems. This is because metals exhibit 3 different crystal structures: FCC, BCC, and HCP.