Figure 23-3: The development of T and B cells. The primary lymphoid organs, where lymphocytes develop from precursor cells, are labeled in yellow boxes.
Figure 24-1. Humoral immunity and cellular immunity. When a pathogen invades the body, the immune system responds with two types of reaction. Cells of the humoral system secrete antibodies that can bind to the pathogen. Cells of the cellular system have antibody-like molecules bound to their surface. Some of the cell types that make up the cellular system support the humoral response; others kill cells that have been infected by pathogens.
Figure 24-2  Antibodies bind to single or multiple determinants on an antigen. (a) Binding of antibody to a protein with a single determinant. The antibody’s two sites can both be filled but the complex cannot grow further. Natural antibodies are mixtures of molecules that can bind to many determinants on an antigen, potentially forming a large aggregate. (b) Some antigens, notably viruses, have multiple identical determinants on a single particle. Even a pure antibody population can form large aggregates when reacting with such antigens.