**FIGURE 16.4** Formation of (a) $\sigma_{2p}$ bonding and (b) $\sigma_{2p}^*$ antibonding molecular orbitals from $2p_z$ orbitals on atoms A and B. The signs refer to phases of the wave function.

**FIGURE 16.5** Formation of (a) $\sigma_{2p}$ bonding and (b) $\sigma_{2p}^*$ antibonding molecular orbitals from $2p_z$ orbitals on atoms A and B.