



FIGURE 19.3. Diagrammatic representations of mechanisms that can drive fluid flow in (A) subduction zones, (B) extensional basins, and (C) compressional (foreland) basins. From Person *et al.* (1996). Fluid-flow mechanisms include (1) topography-driven; (2) compaction/tectonically driven; (3) convection-driven; (4) fluid production during mineral dehydration or juvenile magmatic water derived from intrusions; and (5) seismogenic pumping, whereby pore spaces are abruptly extended and compressed during earthquakes.