

## 5.5 Practice Problem Hints

- 3)
1. First show triangle DEF = triangle DGF using SSS.
  2. Then show angle EDH = angle GDH by CPCTC
  3. Then show triangle DEH = triangle DGH by CPCTC
- 4)
1. Show triangle AGB = triangle DGE, then show AB = DE by CPCTC
  2. Show triangle BHC = triangle EHF, then show BC = EF by CPCTC
  3. Use segment addition postulate to show AC = DF.
- 5)
1. Show triangle ABE = triangle CBE by SAS.
  2. Show angle 4 = angle 5 using CPCTC.
  3. Show angle 3 = angle 6 since they are complementary to equal angles.
  4. Show triangle FAE = triangle DCE by SAS
  5. Show angle 1 = angle 2 by CPCTC.
- 6)
1. Show triangle ABD = triangle CDB by ASA.
  2. Show BC = AD by CPCTC.