- 25. Which of the following statements **best** differentiates the cleaning action of soaps and detergents?
  - (a) Soaps contain a long, non-polar hydrocarbon tail, whereas detergents contain a carboxylate head that dissolves in grease.
  - (b) Detergents form micelles on agitation, whereas the anionic head of soap dissolves in grease.
  - (c) Detergents do not form precipitates with divalent ions found in water, whereas soaps will precipitate out in similar conditions.
  - (d) Soaps contain a sulfonate group that dissolves in water, whereas detergents contain a carboxylate group that dissolves in water.