Eight percent of the Earth's crust is aluminum, and there are hundreds of aluminum-bearing minerals and vast quantities of the rocks that contain them. The best aluminum ore is bauxite, defined as aggregates of aluminous minerals, more or less impure, in which aluminum is present as hydrated oxides. Bauxite is the richest of all those aluminous rocks that occur in large quantities, and it yields alumina, the intermediate product required for the production of aluminum. Alumina also occurs naturally as the mineral corundum, but corundum is not found in large deposits of high purity, and therefore it is an impractical source for making aluminum. Most of the many abundant nonbauxite aluminous minerals are silicates, and, like all silicate minerals, they are refractory, resistant to analysis, and extremely difficult to process. The aluminum silicates are therefore generally unsuitable alternatives to bauxite because considerably more energy is required to extract alumina from them.

1 The author implies that a mineral must either be or readily supply which of the following in order to be classified as an aluminum ore?

(A) An aggregate

(B) Bauxite

(C) Alumina

(D) Corundum

(E) An aluminum silicate

2. The passage supplies information for answering all of the following questions regarding aluminous minerals EXCEPT:

(A) What percentage of the aluminum in the Earth's crust is in the form of bauxite?

(B) Are aluminum-bearing nonbauxite minerals plentiful?

(C) Do the aluminous minerals found in bauxite contain hydrated oxides?

(D) Are aluminous hydrated oxides found in rocks?

(E) Do large quantities of bauxite exist?

3. The author implies that corundum would be used to produce aluminum if

(A) corundum could be found that is not contaminated by silicates

(B) the production of alumina could be eliminated as an intermediate step in manufacturing aluminum

(C) many large deposits of very high quality corundum were to be discovered

(D) new technologies were to make it possible to convert corundum to a silicate

(E) manufacturers were to realize that the world's supply of bauxite is not unlimited