

Read the lecture materials &/or reading materials to thoroughly & accurately answer the following questions.

1. Why is inheritance considered to be a good thing for a Java programmer?
2. Is there a maximum limit to how many parent classes a class can have? If so, what is the limit?
3. List two examples of classes that would have an “is-a” relationship between them. Be creative and make your own examples. Don’t use any examples that were used in the lecture notes. (Ex. Student is-a Person)

Considering the `Person`, `Student`, and `Freshman` classes that are used as examples in the lecture notes are the following statements valid or invalid?

_____ 4. `Person jane = new Freshman();`

_____ 5. `Student joan = new Person();`

_____ 6. `Freshman mary = new Person();`

7. What does a solid line with an open arrowhead represent in a class hierarchy chart?
8. True or False A child class can have one or more properties that do not exist in its parent class.
9. True or False A child class can have a property that uses the same exact name as a property in its parent class.
10. True or False If a class implements the `Comparable` interface then its child class automatically implements the `Comparable` interface even without having the phrase “implements `Comparable`” typed out in its class header.