

YOUR NAME: \_\_\_\_\_

YOUR RCS ID: \_\_\_\_\_ @rpi.edu

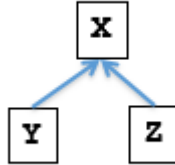
Your RCS ID is the first part of your RPI e-mail address

## Principles of Software Quiz 6

Nov. 1, 2018

10 points total

**Question 1.** (8 points) Given this hierarchy with classes X, Y, and Z:



What are valid instantiations of generics

class A <T extends X >{} ?

A <Y >Given

A <X >, A <Z >

class A <T extends Z >{} ?

A <Z >

class A <T super Z >{} ?

A <X >, A <Z >, A <Object >

class A <T super X >{} ?

A <X >, A <Object >

**Question 2.** (2pts) Which of the following is correct about Factory design patterns?

A This type of design pattern falls under creational patterns.

B The Factory pattern allows us to create objects without explicitly using the **new** operator.

C The Factory pattern allows for the creation of subtypes.

D All of the above.

D