

Mini Quiz 14

Name: _____

Kerberos: _____

Consider the following class hierarchy:

<pre>class X { Y foo(Y y) { ... } }</pre>	<pre>class Y extends X {}</pre>	<pre>class Z extends Y {}</pre>
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Q: Write “typecheck” or “type error” below each of the class definitions below if it would successfully type check or if it would throw an error:

<pre>class A extends X { Z foo(Z z) { ... } }</pre>	<pre>class B extends X { X foo(X x) { ... } }</pre>	<pre>class C extends X { Z foo(X y) { ... } }</pre>	<pre>class D extends X { X foo(Z y) { ... } }</pre>
Type Error	Type Error	Type checks!	Type Error

Q: When would be best to check conditions like the above?
(mark an X by the best time):

- ☐ When parsing
- ☒ When creating the IR
- ☐ When generating code