

Original Partner	Obstacle 6 COMP 10062	Paired Partner ("grader")	SCORE OBTAINED <hr/> 5
Student #		Student #	
		Inheritance	

Answer each question in the space provided. There's a ZIP file available in order to help you get these questions right!

1	<pre> public class ClassA { private static int num; } public class ClassB { ClassA a, b; } </pre>	<p>1a) What kind of a relationship are ClassA and ClassB in?</p> <p>_____</p> <p>type of relationship</p> <p>1b) Draw the UMLs (with the correct arrow) which describes the two classes.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> ClassA <div style="border: 1px solid black; height: 100px; margin-top: 5px;"></div> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> ClassB <div style="border: 1px solid black; height: 100px; margin-top: 5px;"></div> </div> </div>
2	<pre> public class ClassA { } public class ClassB extends ClassA { } </pre> <p>2a) What kind of a relationship are ClassA and ClassB in?</p> <p>_____</p> <p>type of relationship</p> <p>2b) Draw just the connecting arrow between these two UMLs.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> ClassA <div style="border: 1px solid black; height: 100px; margin-top: 5px;"></div> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> ClassB <div style="border: 1px solid black; height: 100px; margin-top: 5px;"></div> </div> </div>	

3	Provide a small example of OVERRIDING and one of OVERLOADING methods				
	<div>//OVERRIDING EXAMPLE</div>	<div>//OVERLOADING EXAMPLE</div>			
4	<div>Declare a 1000 element array of Dice. Then, roll each die once. Output only the current face on the 5th die of the array.</div> <div><table><tr><th>Die</th></tr><tr><td>- numberOfFaces: int - currentFace: int</td></tr><tr><td>+ Die() + Die(numFaces: int) + getCurrentFace() : int + roll() : int + toString() : String</td></tr></table></div>	Die	- numberOfFaces: int - currentFace: int	+ Die() + Die(numFaces: int) + getCurrentFace() : int + roll() : int + toString() : String	
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