## AP® COMPUTER SCIENCE A 2006 SCORING GUIDELINES

## **Question 2: Taxable Items (Design)**

Part A:	purchasePrice 2 1/2 points
+1	<pre>call getListPrice()</pre>
+1	calculate correct purchase price (no penalty if truncate/round to 2 decimal places)
+1/2	return calculated price
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Part B:	Vehicle 6 1/2 points
+1/2	class Vehicle extends TaxableItem
+1/2	private double dealerCost
+1/2	private double dealerMarkup (no penalty if also store tax in field)
+2 1/2	constructor
	+1/2 Vehicle(double ?, double ?, double ?)
	<pre>int/float (OK if match fields)</pre>
	+1 call parent constructor
	+1/2 attempt using super
	+1/2 correct call: super (rate) (note: must be first line in method)
	+1 initialize dealer cost and markup fields +1/2 attempt (must use parameters on RHS or in mutator call)
	+1/2 attempt (must use parameters on RHS or in mutator call) +1/2 correct
+1	changeMarkup
	+1/2 public void changeMarkup(double ?)
	<pre>int/float (OK if matches field; no penalty if returns reasonable value)</pre>
	+1/2 assign parameter to markup field
+1 1/2	getListPrice
	+1 public double getListPrice()
	+1/2 return sum of dealer cost and markup fields

Note: -1 usage if reimplement purchasePrice to do anything other than return super.purchasePrice();