|  | Sign |  |  |
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|  | **Scoring Criteria** | **Decision Rules** |  |
| **1** | Declares class header: class Sign | Responses **will not** earn the point if they  • declare the class as something other than  public | **1 point** |
| **2** | Declares appropriate private instance variable(s) and constructor initializes instance variables using appropriate parameters | Responses **can** still earn the point even if they  • store calculated values instead of the message and width, as long as the declared instance variables can collectively answer the questions and their values are computed from the parameters (correctly or incorrectly)    Responses **will not** earn the point if they  • declare the variable outside the class, or in the class within a method or constructor | **1 point** |
| **3** | Declares constructor header:  Sign(String , int ) | Responses **can** still earn the point even if they  • calculate values in the constructor that are returned by other methods, correctly or incorrectly, as long as the parameter types are correct    Responses **will not** earn the point if they  • declare the constructor as something other  than public | **1 point** |
| **4** | Declares method headers:  public int numberOfLines() public String getLines() | Responses **will not** earn the point if they  • omit either method  • omit public or declare the method as something other than public | **1 point** |
| **5** | numberOfLines divides the message length by the line width | Responses **can** still earn the point even if they  • perform the division in a method other than numberOfLines  • perform the division without using the division operator by counting line-width- sized portions of the message or by counting lines produced by the line- delimiting algorithm  • incorrectly account for the final line  • use a method name inconsistent with the examples, as long as it is recognizably equivalent | **1 point** |
| **6** | numberOfLines returns appropriate value (*algorithm*) | Responses **can** still earn the point even if they  • perform the return value calculation in the constructor  • return a different number of lines than getLines produces, as long as the number returned is the correct number for  the message | **1 point** |

|  |  | • return an incorrect number of lines for the message, as long as the number returned is exactly the number of lines produced by getLines  • use a method name inconsistent with the examples, as long as it is recognizably equivalent    Responses **will not** earn the point if they  • incorrectly account for the final line |  |
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| **7** | getLines returns null  appropriately | Responses **can** still earn the point even if they  • identify null case in a method other than getLines  • use an invalid call to length or == in guard for null return  • use a method name inconsistent with the examples, as long as it is recognizably equivalent    Responses **will not** earn the point if they  • guard the return with incorrect logic | **1 point** |
| **8** | Calls substring and length (or equivalent) on String objects | Responses **can** still earn the point even if they  • calculate substring parameter values incorrectly  • call substring and/or length  from a method other than getLines  • use a method name inconsistent with the examples, as long as it is recognizably equivalent  Responses **will not** earn the point if they  • fail to call substring or length on  String objects  • call substring or length with an incorrect number of parameters, with a parameter of an incorrect type, or with  incorrectly ordered parameters, anywhere in the class | **1 point** |
| **9** | getLines constructs the delimited sign output appropriately (*algorithm*) | Responses **can** still earn the point even if they  • call substring and/or length  incorrectly  • fail to return the constructed String  *(return not assessed)*  • handle the empty string /null case incorrectly  • construct the output in the constructor  • use a method name inconsistent with the examples, as long as it is recognizably  equivalent | **1 point** |

| Responses **will not** earn the point if they  • end the constructed output with a ; or extraneous spaces  • modify the contents of message or width after they have been initialized *(no additional –1y penalty)* |  |
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| **Question-specific penalties** |  |
| None |  |
| **Total for question 2** | **9 points** |