**Take Home: Quiz 6 (15 pts) – Binary Search Trees**

Using Canvas <https://canvas.wsu.edu/>, please submit your solution to the correct quiz folder. Your solution should be a .pdf file with the name <your last name>\_quiz6.pdf and uploaded. To upload your solution, please navigate to your correct Canvas ***lab*** course space. Select the “Assignments” link in the main left menu bar. Navigate to the correct quiz submission folder. Click the “Start Assignment” button. Click the “Upload File” button. Choose the appropriate .pdf file with your solution. Finally, click the “Submit Assignment” button.

1. **(8 pts)** What is a binary search tree (BST)? Describe the properties of a BST in your answer.
2. **(7 pts – 1 pt/number)** Given the following sequence of numbers: 50, 15, 12, -50, 7, 80, 20. If the numbers are inserted into a BST in the sequence provided, then what would the tree look like? Draw a diagram for the BST. Be sure to show both branches of a given node.