

**17-654/17-754: Analysis of Software Artifacts**  
**Class Participation Sheet**  
**For Lecture 13, Dataflow Analysis, Part III**  
**Date: February 26, 2008**

**Name:** \_\_\_\_\_ **Andrew ID:** \_\_\_\_\_

**Question 1.** Write flow functions for Live Variable analysis:

$$f_{LV}(\sigma, [x := e]) =$$

$$f_{LV}(\sigma, /* any other */) =$$

**Question 2.** Show how the worklist algorithm given in class operates on the program given, by filling in the table on the right.

```
[y := x]1;  

[z := 1]2;  

while [y > 1]3 do  

    [z := z * y]4;  

    [y := y - 1]5;  

[y := 0]6;
```

Position	Worklist	Lattice Value
exit		

**Optional:** Ask a question, make a suggestion, or provide feedback to the instructor/TAs