6.006 Homework **Problem Set 3, Part B** # INSERT COLLABORATORS HERE YOUR NAME HERE October 7, 2008

(a) The running time of the algorithm is

Θ (INSERT RUNNING TIME HERE)

because INSERT EXPLANATION HERE

- (b) EXPLAIN YOUR ALGORITHM ANALYZE ITS RUNNING TIME
- (c) EXPLAIN YOUR ALGORITHM (and analyze its running time) OR EXPLAIN WHY YOU CAN'T DO BETTER

6.006 Homework **Problem Set 3, Part B** # INSERT COLLABORATORS HERE YOUR NAME HERE October 7, 2008

- (a) DESCRIBE IMPLEMENTATION OF PARENT
- (b) DESCRIBE IMPLEMENTATION OF CHILD
- (c) HEIGHT OF HEAP
- (d) ASYMPTOTIC RUNNING TIMES OF INSERT AND HEAPIFY EXPLAIN WHY
- (e) NEW HEIGHT OF HEAP
- (f) NEW RUNNING TIMES OF INSERT AND HEAPIFY EXPLAIN WHY