

## Hw3- Due Dec. 7

Consider the following 8-puzzel states

1	2	3
8	6	
7	5	4

1	2	3
8		4
7	6	5

Given a puzzle state like the one on the left, where the numbers are in the wrong places, we want to search for a series of moves which ends in the solution above, on the right.

Consider the **Manhattan** heuristic function,  $h$ , discussed in class.

- Explain why this  $h$  is admissible.
- What is the value of  $h$  for the above board state?
- Solve the problem using  $A^*$ .