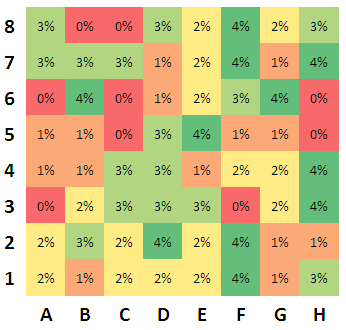
**June 2012 - Lost At Sea**



Searching for a lost ship at sea is a time sensitive task that requires skill and urgency.  Finding a lost ship quickly means the difference between life and death.

The map in Figure 1 shows a section of ocean divided into 64 cells.  Somewhere in this grid, a ship has been lost.  Each cell has a number that represents the probability of finding the lost ship when that cell is searched (based on last known position, ocean currents, and debris sightings).  For example, if you searched cell A1, you would have a 2% chance of finding the lost ship there.

As the leader of the search and rescue team, your goal is to find the ship with all survivors.  Unfortunately it takes you 1 day to search a cell and the lost sailors have only enough food and water to survive for 10 days.  This allows you to search a total of 10 cells before the lost sailors perish.

You may start your search in any of the 64 cells.  You are only allowed to move to adjacent cells (you cannot move diagonally) and you are not allowed to revisit any cells.  Add up the percentages in the 10 cells you have searched to get the probability of finding the lost ship.

**Question:  What is the greatest probability of finding the lost ship?**