Extra problems on GT

1. What are the Nash equilibria of the following game after one eliminates dominated strategies?

3, 3	0, 3	0, 0
3, 0	2, 2	0, 2
0, 0	2, 0	1, 1

2. Two California teenagers Bill and Ted are playing Chicken. Bill drives his hot rod south down a one-lane road, and Ted drives his hot rod north along the same road. Each has two strategies: Stay or Swerve. If one player chooses Swerve he looses face; if both Swerve, they both lose face. However, if both choose Stay, they are both killed. The payoff matrix for Chicken looks like this:

-3, -3	2, 0
0, 2	1, 1

a. Find all pure strategy equilibria.
b. Find all mixed strategy equilibria.
c. What is the probability that both teenagers will survive?

3. Two radio stations, COOL and WIRD, choose for themselves their program formats. They can play: Country (C), Modern Music (N), and Info (I). It is known that the local market is divided into the following groups of potential listeners: 50% (C), 30% (N) and 20% (I). What will be the outcome of the game? *Hint: payments are made directly proportional to the market share of each radio station.*