1. D. If the sun must rise tomorrow, then the probability is 1.

   The sun’ll come out, tomorrow,  
   Bet your bottom dollar, that tomorrow,  
   There’ll be sun,  

   Just thinkin’ about, tomorrow,  
   Clears away the cobwebs and the sorrow, till’ there’s none,  

   When I’m stuck with a day, that’s grey and lonely,  
   I just stick out my chin, and grin, and say,  

   Oh, the sun’ll come out tomorrow,  
   So you gotta’ hang on till’ tomorrow,  
   Come what may.  

   Tomorrow tomorrow, I love you tomorrow,  
   Your’e only a day away,

Is the probability that the sun will come out tomorrow = 1?

2. C.

   Questions 3, 4, and 5 all involve multiple-step experiments

3. C. This is similar to homework 5, #1. The answer is $4 \times 3 \times 2 = 24$.

4. D. There are $3 \times 3 = 9$ possible outcomes: WW, WT, WL, TW, TT, TL, LW, LT, and LL.

5. a. There are 26 ways to choose the letter, 10 ways to choose the 1st digit, 10 ways to choose the 2nd digit, 10 ways to choose the 3rd digit, and 10 ways to choose the 4th digit. The total number of possible IDs is $26 \times 10 \times 10 \times 10 \times 10 = 260,000$

   b. Once the letter has been chosen, there are 10,000 ways to choose the four digit number.