Probability

1.   AARDVARK

The letters in the word AARDVARK are printed on square pieces of cardboard (same size squares) with letter per card The eight letters are then placed in a hat and one letter card is randomly chosen from the hat.

a)   Complete the table:

Outcomes	A	R	D	V	K
Probability					

Consider the following events:

        V: the letter chosen is a vowel
        F: The letter chosen falls in the first half of the alphabet (A – M)

Determine the following probabilities:

b)   P(V)   c)   P(F)

d)   P(V or F)   e)   P(F^c)

f)   Determine if the events V and F are independent:

2.   AP FREE-RESPONSE QUESTION (1999)

Die A has four 9's and two 0's on its faces. Die B has four 3's and two 11's on its faces. When either of these dice is rolled, each face has an equal chance of landing on top. Two players are going to play a game. The first player selects a die and rolls it. The second player rolls the remaining die. The winner is the player whose die has the higher number on it.

Suppose you are the first player and you want to win the game. Which die would you select and why?