Probability: Using the Fundamental Counting Principle

Example: Find the number of possibilities if a license plate is made consisting of 2 letters followed by 2 digits. Repetition is permitted.

First, draw out a blank for each space:

___  ___  ___  ___
letter  letter  number  number

Then, write in each blank how many possible letters or numbers you have to work with:

26  26  10  10
letter  letter  number  number

Next, multiply these numbers: 26 x 26 x 10 x 10. This will give you the answer:

67,600 possibilities