

## Answer on Question #81056 – Math – Statistics and Probability

### Question

Two sets of cards are placed into separate bags. Each card has one letter.

Bag 1: I L J A U

Bag 2: L R H E C A

Anna randomly picked one card from each bag. Find the probability that:

- i. She picked the letters 'U' and 'H'.
- ii. Both letters are 'L'.
- iii. Both letters are vowels

### Solution

- i. The probability that she picked 'U' and 'H'

$$P(U\&H) = \frac{1}{5} \times \frac{1}{6} = \frac{1}{30}$$

- ii. The probability that both letters are 'L'

$$P(L\&L) = \frac{1}{5} \times \frac{1}{6} = \frac{1}{30}$$

- iii. The probability that both letters are vowels: 'A', 'E', 'I', 'O', 'U'

$$P(\text{both vowels}) = \frac{3}{5} \times \frac{2}{6} = \frac{1}{5}$$