To construct the probability distribution for the random variable X, which represents the sum of the two spins, we need to consider all possible outcomes and their corresponding probabilities:

If the first spin is 1, and the second spin is 1, then X = 2. The probability of this outcome is 0.25 * 0.25 = 0.0625.

If the first spin is 1, and the second spin is 2, then X = 3. The probability of this outcome is 0.25 * 0.75 = 0.1875.

If the first spin is 2, and the second spin is 1, then X = 3. The probability of this outcome is 0.75 * 0.25 = 0.1875.

If the first spin is 2, and the second spin is 2, then X = 4. The probability of this outcome is 0.75 * 0.75 = 0.5625.

Therefore, the probability distribution for the random variable X is:

X	P(X)
2	0.0625
3	0.375
4	0.5625