When you roll two dice, you have 6 possibilities for each roll (6 sides). This is 36 total combinations.

Let's list the combinations that result in sums greater than 9.

(4,6) (6,4) (5,5) (6,5) (5,6) (6,6)

That's 6 out of the 36 total possibilities. Therefore, the remaining 30/36 possibilities fulfill the less than or equal to 9 requirement. Simplifying by a factor of 6, that's 5/6 chance.