

If we would test that coin is equal from both sides than  $P(\text{head}) = P(\text{not head}) = 1/2$

$$P(11 \text{ heads out of } 15) = \text{cuz binomial distribution} = C_{15}^{11} 1/2^{11} * 1/2^4 = (1/2)^{15} * \frac{15 * 14 * 13 * 12}{4 * 3 * 2} = 1365/2^{15} = 4\%$$

Would you reject the hypothesis that the coin is unbiased if you see 11 heads in 15 throws?

I think that could happen, so coin might be as unbiased and biased either.