

Text Explanation

Think about the problem this way: I have 3 identical green shirts and 3 identical red shirts to distribute to six children. If I simply designate the three who will get green shirts, that determines everything, because once I know which three get the green shirts, I automatically know the other three get the red shirts. So, the number of possible outcomes is just the number of ways we could choose a combination of 3 from the set of six. That's the combination number nCr :

$${}^6C_3 = 20.$$