JEE Main 31 January 2024 Shift 2 Answer Key

Mathematics

Q.1: If the 2nd, 8th, and 44th term of A.P. is 1st, 2nd, and 3rd terms respectively of G.P. and the first term of A.P. is 1, then what will be the sum of the first 20 terms of A.P.?

A.1: 970

Q.2: A coin is biased such that the head has two chances and the tails. What's the probability of getting 2 heads and 1 tail?

A.2: 4/9

Q.3: The number of ways to distribute the 21 identical apples to three children so that each child gets at least 2 apples is?

A.3: 136

Q.4: If a = $\sin^{-1}$ (sin 5), b = $\cos^{-1}$ (cos 5) then $a^2 + b^2$ is equal to?

A.4: $8\pi^2 - 40\pi + 50$