Answer on Question #82015 — Math — Statistics and Probability Question

Given that 51.3% of all newly born children are boys; then what is the probability that in a sample of 5 newly born children; exactly 3 are boys.

Solution

$$P = C(3, 5) * 0.513^{3} * (1-0.513)^{2} = \frac{5!}{3!(5-3)!} 0.513^{3} \cdot 0.487^{2} = 10 * 0.135 * 0.237 = 0.32$$

Answer: p=0.32.