

Check

Five geometry students are asked to randomly choose a polygon and describe its properties. What is the probability that the first three students choose the hexagon, the pentagon, and the triangle, in that order?



Step1: find the number of possible outcomes

$$5! = 5 \times 4 \times 3 \times 2 \times 1 =$$

Step2: find the number of favorable outcomes

$$1 \times 1 \times 1 \times 1 \times 1 =$$

Step3: calculate the probability

$$\text{Probability} = \frac{\text{Favorable Outcomes}}{\text{Total Outcomes}} = \frac{1}{120}$$