

Probability

- The previous task had elements of probability in it – let's talk about what probability is in maths!
- Probability measures how likely an event is to happen. The probability of an event occurring is given by:

$$P(A) = \frac{\text{Number of times A occurs}}{\text{Total number of possible outcomes}}$$

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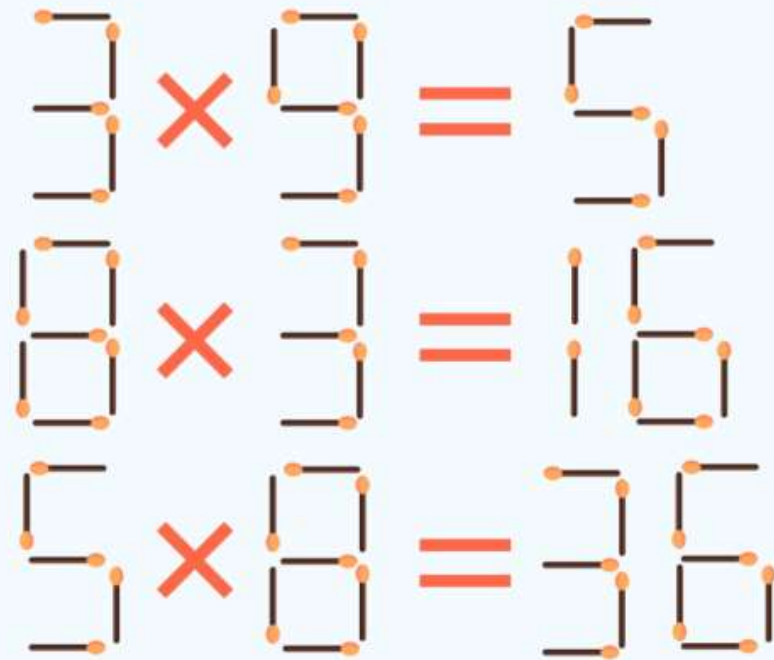
- We denote an event (something that we're calculating the probability of) by capital letters – here "A"

• Task 1: Rolling a Die

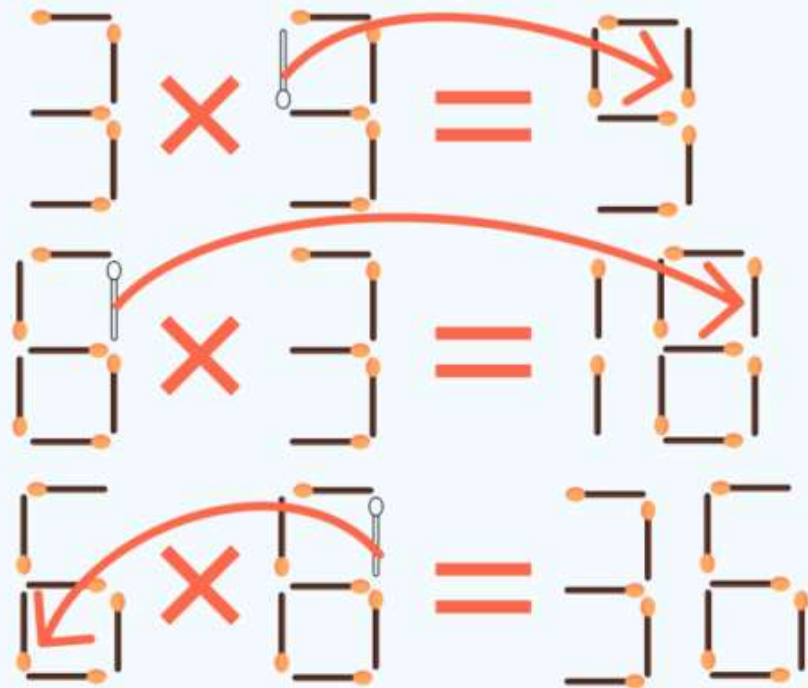
A fair six-sided die is rolled.

1. What is the probability of rolling a **4**?
2. What is the probability of rolling an **even number**?
3. What is the probability of rolling a number greater than **4**?

Move one match to get correct equality



Move one match to get correct equality



Solving the puzzles

- What strategies do you use when solving matchstick puzzles?
- Do you look for patterns first or just start moving sticks?
- Some matchstick puzzles have more than one solution!



summary

In today's session, we explored various logical tasks.

These tasks not only helped us improve our critical thinking and problem-solving skills, but they also connected with important mathematical concepts such as pattern recognition, strategy, and logical deduction.

By applying basic mathematical logic, we were able to think more systematically and tackle problems in a structured way, which is a valuable skill both in math and beyond.

