

Probability as a fraction – out of total outcomes

MODULE 7 · DATA, CHANCE AND THE CO-ORDINATE PLANE SHAPE & SPACE

Probability measures how likely something is to happen. Write it as a **fraction**: number of ways the event can happen ÷ total number of equally likely outcomes.

- Rolling a 6 on a die: $\frac{1}{6}$. As a decimal ≈ 0.17 , or about **17%**.
- Drawing a red card from a full deck: $\frac{26}{52} = \frac{1}{2} = 0.5 = \mathbf{50\%}$.

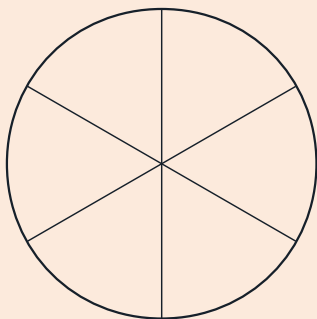
HOW TO ANSWER TODAY

- **Probability.** Probability = outcomes you want ÷ total outcomes. Write as a fraction, decimal, or percent.

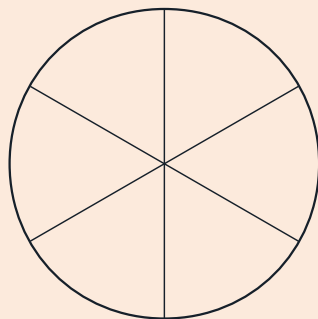
Spinner with 4 equal parts, 1 red → $\frac{1}{4} = 0.25 = 25\%$

TRY IT ON THE LINE

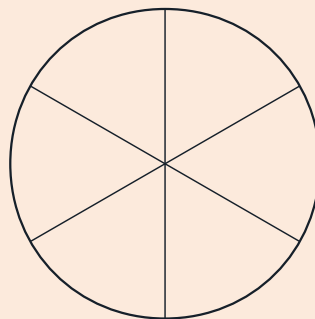
Each circle is split into 6 sectors — one per outcome on a six-sided die. Use a different circle for each task. Shade the favourable outcomes and write the probability as a fraction.



Die A — even



Die B — > 4



Die C — 1 or 6

1. Die A: shade the sectors for 'rolling an **even number**'. $P(\text{even}) = \frac{\quad}{6} = \frac{\quad}{\quad}$
2. Die B: shade sectors for 'rolling a number **greater than 4**'. $P(>4) = \frac{\quad}{6} = \frac{\quad}{\quad}$
3. Die C: shade sectors for 'rolling a **1 or 6**'. $P(1 \text{ or } 6) = \frac{\quad}{6} = \frac{\quad}{\quad}$