

Day 2: Compound Event Probability

Objective

In this challenge, we practice calculating the probability of a compound event. We recommend you review today's [Probability Tutorial](#) before attempting this challenge.

Task

There are 3 urns labelled X, Y, and Z.

- Urn X contains 4 red balls and 3 black balls.
- Urn Y contains 5 red balls and 4 black balls.
- Urn Z contains 4 red balls and 4 black balls.

One ball is drawn from each of the 3 urns. What is the probability that, of the 3 balls drawn, 2 are red and 1 is black?

- $10 / 63$
- $2 / 7$
- $17 / 42$
- $31 / 126$