2.10 Lesson 10 Sample space diagrams with Grim dice

Consider a game in which two players roll a single Grim dice each. The player with the highest score wins. Use the sample space diagrams to determine which one of each pair of Grim dice has the highest **theoretical probability** to win.

Red die / Olive die grid

On average which dice wins?

What is the probability of that dice winning?
$P(\ldots\ldots > \ldots\ldots) =$

Olive die / Blue die grid

On average which dice wins?

What is the probability of that dice winning?

Red die / Blue die grid

On average which dice wins?

What is the probability of that dice winning?

	Magenta die				
Yellow die					

On average which dice wins?

What is the probability of that dice winning?

	Yellow die				
Olive die					

On average which dice wins?

What is the probability of that dice winning?

	Magenta die				
Red die					

On average which dice wins?

What is the probability of that dice winning?

Draw a diagram showing which dice colours beat the others. Can you devise a strategy to beat 2 other players when rolling the dice?

BLUE

RED   **OLIVE**

MAGENTA   **YELLOW**