

Homework

Graham is looking for his house key. The probability that it is in his pocket is $\frac{5}{9}$, while the probability that it is in his car is $\frac{1}{13}$. What is the probability that

- a the key is either in his pocket or in his car
- b the key is somewhere else?

Abigail has a bag containing discs of four different colours. One disc is removed at random. The table shows the probabilities of choosing three of the four colours.

Colour	red	white	blue	pink
Probability	$\frac{2}{7}$	$\frac{2}{9}$	$\frac{1}{4}$	

Abigail removes one disc at random. What is the probability that this disc is

- a red or white
- b white or blue
- c red, white or blue
- d pink?

Maya rolls an ordinary dice. What is the probability that the number on the dice is

- a an even number
- b a prime number
- c either even or prime?

Your answer to part **c** should not be the sum of the answers to parts **a** and **b**. Why not?

Rajev has a pack of playing cards with some cards missing. There are 45 cards in the pack. He knows that all the clubs and hearts are in his pack. One card is drawn at random from the pack. What is the probability that this card is not a club or a heart?