

PROBABILITY PROBLEMS

- 1 A pack of 20 cards is numbered 1 to 20. Determine the probability of each of these events if a card is selected at random from the pack.

a P(the number 6)	b P(a multiple of 3)
c P(prime number)	d P(not prime)

- 2 A book has pages numbered from 1 to 45. What is the probability of randomly opening the book on a page number containing at least one 3?
- 3 There are three types of marbles in a bag: blue, red and yellow. The probability of drawing out a blue marble without looking is $\frac{1}{2}$ and the probability of selecting a red marble is $\frac{1}{3}$. What is the probability of selecting a yellow marble?
- 4 From a group of red and blue beetles, there is a 75% chance of randomly selecting a red beetle. If there are 24 red beetles, how many beetles are there altogether?
- 5 Arun has a pack of cards numbered 1 to 9. Sally has a die. Arun wins his game if he selects a card that is less than 8. Sally wins her game if she tosses a number less than 6. Who has the greater chance of winning their game? Explain your answer.
- 6 The probability of selecting a dark chocolate from a full box of 25 chocolates is one in five. What is the probability of selecting a dark chocolate after Nick eats one of the dark chocolates?