	Statistics and Probability Revision	4

(a)

The table shows the probability of a child having different coloured eyes.

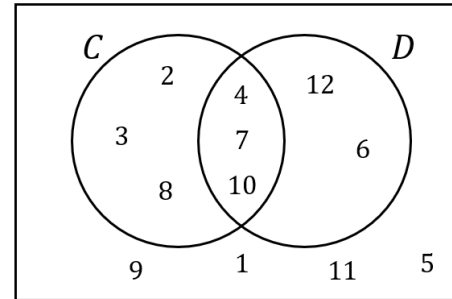| Blue	Brown	Green	Grey
0.15	0.37		

The probability of having green eyes is three times the probability of having grey eyes. Complete the table.

(b)

Seher has a biased six-sided dice. When rolled, the probability of the dice landing on a four is 0.35. Seher is going to roll the dice 500 times. Work out an estimate of the number of times it will land on a four.

(c)

The Venn diagram shows the numbers in each of the sets C and D and the universal set.

(i) List the members of $C \cup D$

(ii) List the members of C'

(iii) List the members of $C \cap D'$

(d)

Six numbers

$$4 \quad x \quad x \quad 9 \quad 11 \quad y$$

are written in order of size. The numbers have a median of 7.5 and a mean of 8. Find the values of x and y.

(e)

A bag contains red, white and black counters. There are x red counters, $2x$ white counters and 6 black counters. When a counter is picked at random from the bag, the probability that it is a black counter is $\frac{1}{5}$.

Find the value of x.

(f)

Class 7A has 20 students and class 7B has 24 students. Both classes sat a History test. The mean score in 7A was 70.2 and the mean score in 7B was 73.25. Find the mean test score across both classes, giving your answer correct to 1 decimal place.