1 The table shows information about the weights, in kilograms, of 40 babies.

Weight (*w* kg)	Frequency
$2 < w \leqslant 3$	12
$3 < w \leqslant 4$	16
$4 < w \leqslant 5$	9
$5 < w \leqslant 6$	2
$6 < w \leqslant 7$	1

One of the 40 babies is going to be chosen at random.

(c) Find the probability that this baby has a weight of more than 5 kg.

Baby weight more than 5 kg $= \dfrac{2}{40} + \dfrac{1}{40}$ ①

$= \dfrac{3}{40}$ ①

$\dfrac{3}{40}$

....

(2)

(Total for Question 1 is 2 marks)

A student in class 8R is to be chosen at random.

The probability that this student won at least one gold star last week is 0.39

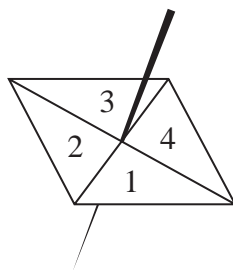2 (b) Work out the probability that this student did **not** win at least one gold star last week.

$$1 - 0.39 = 0.61 \quad ①$$

0.61

(1)

(Total for Question 2 is 1 marks)

3 Here is a biased 4-sided spinner.

The table gives the probabilities that, when the spinner is spun once, it will land on 1 or it will land on 3

Number	1	2	3	4
Probability	0.26	0.28	0.18	0.28

The probability that the spinner will land on 2 is equal to the probability that the spinner will land on 4

Ravina is going to spin the spinner a number of times.

Ravina works out that an estimate for the number of times the spinner will land on 3 is 45

Work out an estimate for the number of times the spinner will land on 4

$$P(2 \text{ or } 4) \cdot \frac{(1 - 0.26 - 0.18)}{2}$$

$$= \frac{0.56}{2} = 0.28 \quad \textcircled{1}$$

$$\text{Land on } 4 : \frac{45}{0.18} \times (0.28)$$

$$= 150 (0.28) \quad \textcircled{1} \quad \textcircled{1}$$

$$= 70 \quad \textcircled{1}$$

70

(Total for Question 3 is 4 marks)