11.2 Answers

11.2.1 Solutions (Homework Revision)

Answer 1

(a) **(i)** $\frac{2}{7}$ **(b)** It's palindromic (A palindrome)

(ii) $\frac{6}{7}$

(iii) 0

(iv) $\frac{3}{7}$

Answer 2

(a) **(i)** $\frac{1}{20} = 5\%$ **(b)** 20

(ii) $\frac{6}{20} = 30\%$

(iii) $\frac{8}{20} = 40\%$

Answer 3

(a) **(i)** 60% **(b)** 7

(ii) 20%

(iii) 80%

Answer 4

(i) 19%

(ii) 51%

(iii) 35%

(iv) 8%

(v) 79%

Answer 5

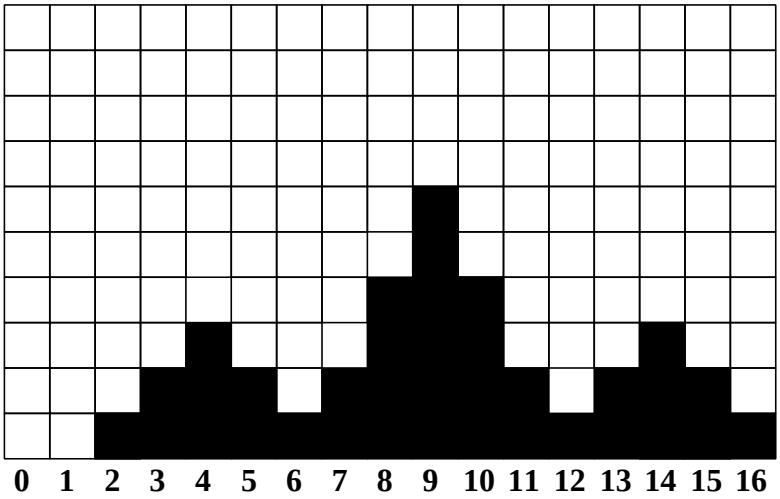
86.3%

Answer 6

(a)

						
	2	3	4	7	8	9
	3	4	5	8	9	10
	4	5	6	9	10	11
	7	8	9	12	13	14
	8	9	10	13	14	15
	9	10	11	14	15	16

(b)



Make a note that either each square represents a probability of $\frac{1}{36}$
on add numbers and labels to the *y*-axis

(c) **(i)** 9

(ii) 2, 6, 12, 16

(iii) $\frac{18}{36}$ or $\frac{1}{2}$

Answer 7

Frequencies :	10	10	5	15
Probabilities ;	25%	25%	12.5%	37.5%

The die may be biased against rolling “flowers” and in favour of rolling “chocolate”.

Answer 8

(i) $\frac{1}{25}$

(ii) $\frac{1}{25}$

(iii) $\frac{4}{25}$

(iv) $\frac{1}{25}$

(v) $\frac{7}{25}$

Answer 9

(i) $\frac{2}{121}$

(ii) $\frac{4}{121}$

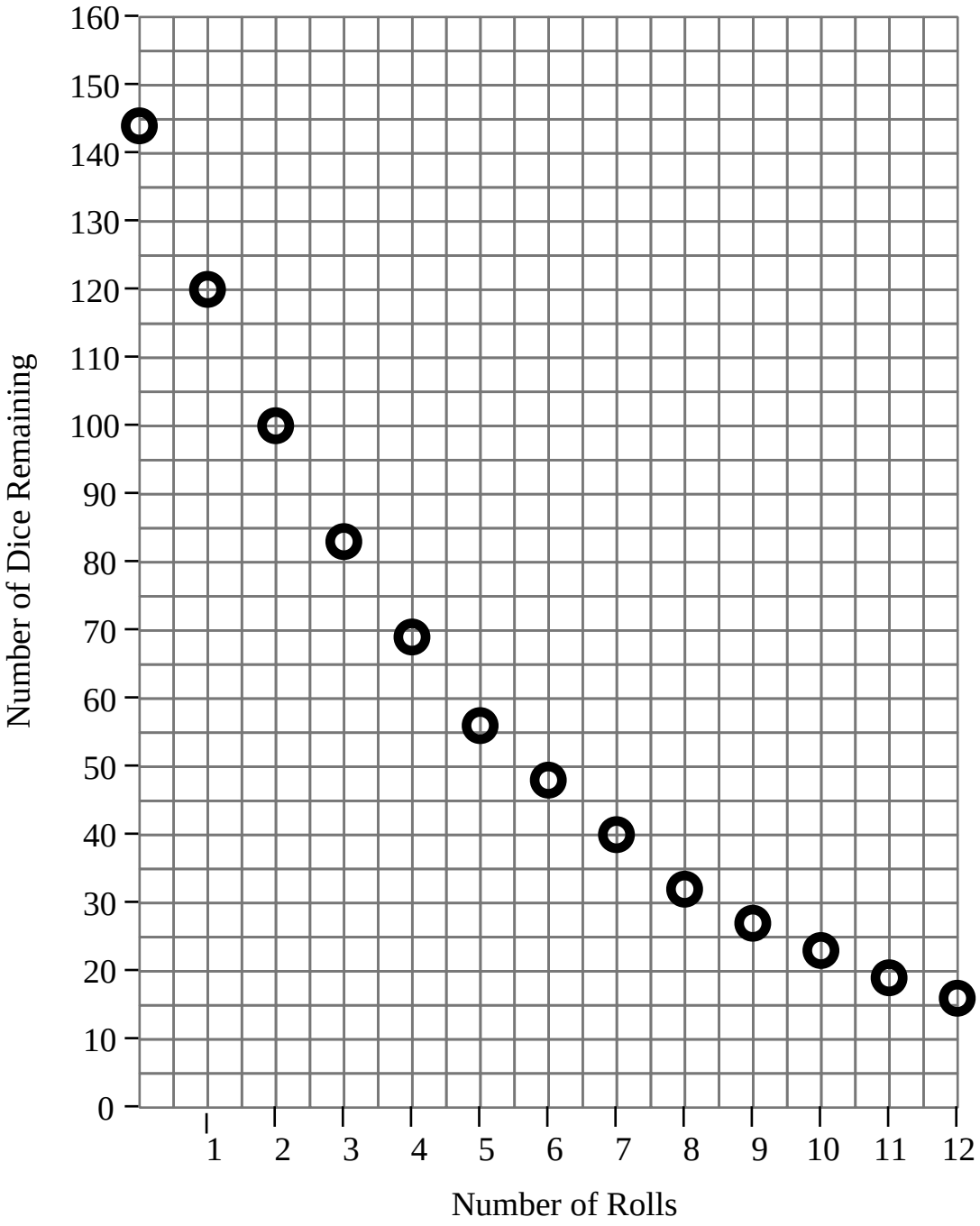
(iii) $\frac{9}{121}$

(iv) $\frac{28}{121}$

(v) $\frac{56}{121}$

(vi) $\frac{16}{121}$

Answer 10



N° of Rolls	0	1	2	3	4	5	6	7	8	9	10	11	12
N° of Dice	144	120	100	69	57	48	40	33	28	23	19	16	13

To half takes about 3.8 throws. ∴ After 4 throws