

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

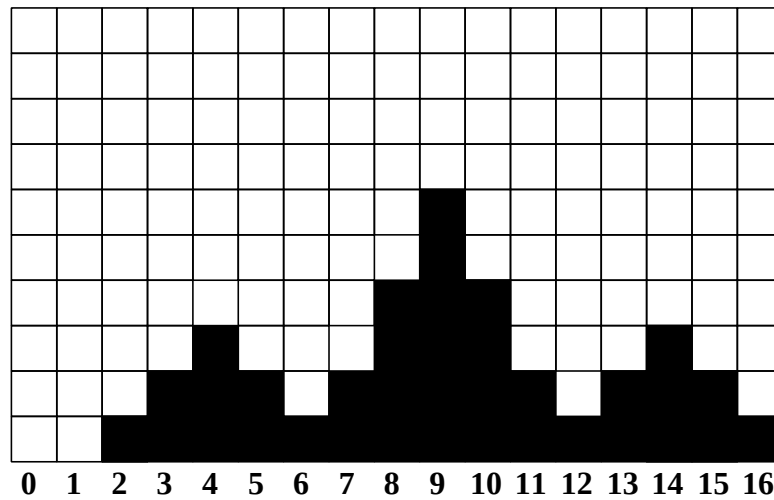
86.3%

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”.

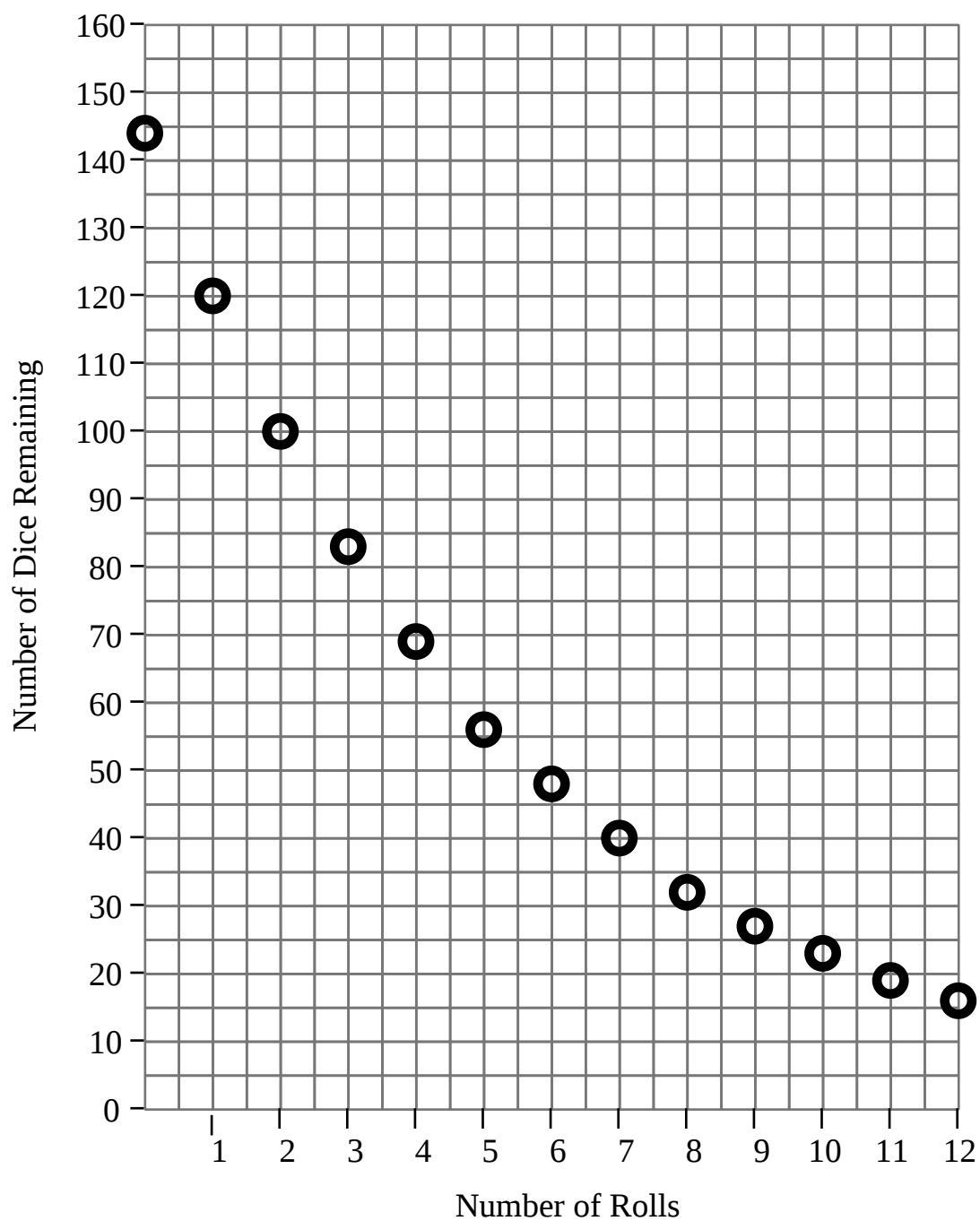
Answer 8

- (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. $\therefore$ After 4 throws

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Teachers may obtain detailed worked solutions to the exercises by email from MHShrewsbury@Gmail.com