

Two-Way Tables

ANSWERS

1

60 students were asked how they travel to school.

(a) Complete the two-way table. (b) How many girls take the bus?

	Walk	Bus	Total
Boys	12	16	28
Girls	20	12	32
Total	32	28	60

(b) 12

2

80 people chose a drink at a café.

(a) Complete the two-way table. (b) How many people chose juice?

	Tea	Juice	Total
Adults	30	18	48
Children	8	24	32
Total	38	42	80

(b) 42

3

50 pupils chose a club.

(a) Complete the two-way table. (b) How many Year 8 pupils chose art?

	Art	Chess	Total
Year 7	14	9	23
Year 8	11	16	27
Total	25	25	50

(b) 11

4

100 shoppers paid for their shopping.

(a) Complete the two-way table. (b) How many shoppers paid by card?

	Card	Cash	Total
Online	38	4	42
In store	41	17	58
Total	79	21	100

(b) 79

5

70 dogs at a show.

There are 30 small dogs. 19 small dogs have short hair. 45 dogs have short hair.

(a) Complete the two-way table. (b) How many large dogs have long hair?

	Short hair	Long hair	Total
Small	19	11	30
Large	26	14	40
Total	45	25	70

(b) 14

6

90 people ate at a restaurant.

40 people ate lunch. 12 lunch customers had a starter. 43 people had a starter.

(a) Complete the two-way table. (b) How many dinner customers had no starter?

	Starter	No starter	Total
Lunch	12	28	40
Dinner	31	19	50
Total	43	47	90

(b) 19

7

120 students sat a test.

58 of the students are boys. 44 boys passed. 95 students passed altogether.

(a) Draw and complete a two-way table. (b) How many girls failed?

	Pass	Fail	Total
Boys	44	14	58
Girls	51	11	62
Total	95	25	120

(b) 11

8

150 visitors to a park.

Each visitor walked or cycled.

90 visitors are adults. 63 adults walked. 98 visitors walked.

(a) Draw and complete a two-way table. (b) How many children cycled?

	Walked	Cycled	Total
Adults	63	27	90
Children	35	25	60
Total	98	52	150

(b) 25

Two-Way Tables further practice

ANSWERS

9

A cinema sold 90 tickets.

35 were adult tickets. 21 adult tickets were bought online. 48 tickets altogether were bought online.

(a) Draw and complete a two-way table. (b) How many child tickets were bought at the desk?

	Online	Desk	Total
Adult	21	14	35
Child	27	28	55
Total	48	42	90

(b) 28

10

180 students in Years 7 and 8 said how they have lunch.

(a) Complete the two-way table. (b) How many Year 8 students go home for lunch?

	School dinner	Packed lunch	Home	Total
Year 7	46	31	8	85
Year 8	39	42	14	95
Total	85	73	22	180

(b) 14

11

A youth orchestra has 48 players.

(a) Complete the two-way table. (b) What fraction of the wind players are under 14? Give your answer in its simplest form.

	Under 14	14 and over	Total
Strings	18	12	30
Wind	6	12	18
Total	24	24	48

6 out of 18
 $\frac{1}{3}$

(b) $\frac{1}{3}$

12

A climbing centre has 64 members.

28 are juniors. Half of the juniors climb on Saturdays. 37 members altogether climb on Saturdays.

(a) Complete the two-way table. (b) How many adults do not climb on Saturdays?

	Saturday	Not Saturday	Total
Juniors	14	14	28
Adults	23	13	36
Total	37	27	64

(b) 13

13

A ferry carries 200 passengers. 30% of them are children. 38 children are on the deck. 110 passengers altogether are on the deck.

(a) Complete the two-way table. (b) How many adults are not on the deck?

	On deck	Inside	Total
Adults	72	68	140
Children	38	22	60
Total	110	90	200

30% of 200 = 60

(b) 68

14

Priya filled in this two-way table about 70 people at a quiz night. She has made one mistake. Find it and correct it.

	Prize	No prize	Total
Adults	13	22	35
Teens	19	16	35
Total	32	36	70

22 + 16 = 38

Answer 38, not 36

15

152 students in Years 9, 10 and 11 chose a trip to the coast or to the city.

(a) Complete the two-way table. (b) How many more Year 11 than Year 9 students chose the city?

	Coast	City	Total
Year 9	28	22	50
Year 10	19	31	50
Year 11	17	35	52
Total	64	88	152

(b) 13

16

Theo asked Year 7 and Year 8 students if they enjoyed a school trip. He says Year 7 enjoyed it more than Year 8, because more Year 7 students said yes. Is Theo right? Explain.

	Yes	No	Total
Year 7	24	16	40
Year 8	18	2	20
Total	42	18	60

$\frac{3}{5}$ of Year 7, $\frac{9}{10}$ of Year 8

Answer No