

Mean from a Frequency Table

Video 54 on www.corbettmaths.com

Workout

Question 1: Work out the mean for each of these frequency tables.
You may not use a calculator

(a)

Age	Frequency
5	2
6	2
7	5
8	1

6.5

(b)

2.3

Number of phones	Frequency
0	1
1	3
2	2
3	0
4	4
5	0

(c)

1.55

Number of pets	Frequency
0	13
1	28
2	50
3	9

(d)

Money Withdrawn	Frequency
£10	16
£20	19
£30	4
£40	3
£50	6
£60	2

£24

(e)

Number of bedrooms	Frequency
1	34
2	275
3	512
4	179

2.836

(f)

Level	Frequency
3	1
4	9
5	7
6	2
7	1

4.65

Question 2: Work out the mean for each of these frequency tables.
You may use a calculator

(a)

16.475

Age	Frequency
16	28
17	7
18	3
19	2

(b)

5.645

Grade	Frequency
3	16
4	27
5	45
6	49
7	50
8	13

(c)

0.4818

Siblings	Frequency
0	71
1	25
2	14

(d)

£2.933..

Pocket Money	Frequency
£1	5
£2	34
£3	86
£4	19
£5	3
£6	3

(e)

2.64

Star rating	Frequency
0	9
1	12
2	17
3	19
4	21
5	8

(f)

1.49

Times visited	Frequency
0	131
1	873
2	599
3	205

Apply

Question 1: A teacher asked his class how long they spent revising for a test, to the nearest hour. By calculating the mean, compare the amount of time the boys and girls spent revising.

mean =
3 hours

Boys

Hours	Frequency
0	0
1	2
2	3
3	4
4	5
5	1

boys spent
longer revising

Girls

Hours	Frequency
0	2
1	7
2	2
3	2
4	1
5	1

mean =
1.73 hours

Question 2: Aidan plays 50 games in an arcade. The table shows how many tickets he won in each game.

- (a) Work out the missing frequency 6
- (b) Work out the total number of tickets won 203
- (c) Work out the mean number of tickets won per game. 4.06

Tickets won	Frequency
0	4
1	3
2	5
3	
4	11
5	6
6	10
7	2
8	3

Aidan wants to exchange his ticket for a prize that costs 800 tickets. 147

- (d) How many more games do you expect Aidan would have to play?
 $800 - 203 = 597$ $597 \div 4.06 \approx 147$ games

Question 3: Max rolls a dice 80 times. The table shows the results.

- (a) Find the value of x 15
- (b) Work out the mean score 3.95

Number	Frequency
1	4
2	6
3	$x + 5$
4	x
5	$2x$
6	5