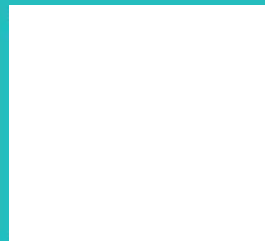


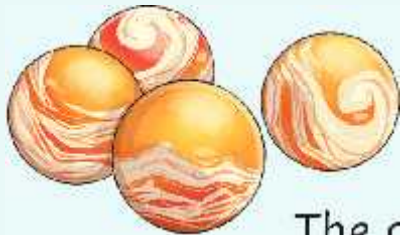
Maths Mastery

Mean Average Activities



What Is the Mean?

Five children have some marbles as shown:



Child A	10 marbles
Child B	8 marbles
Child C	5 marbles
Child D	4 marbles
Child E	3 marbles

The children decide to share the marbles equally.

Explain:

how they will do this; Put all the marbles together and share them equally.

how many marbles each child will have; There are 30 marbles to share between 5, so 6 each.

what this has to do with calculating the mean.

Answers

Calculating the mean of a set of data is to share the data equally. In many cases this cannot be done practically, as it can with the marbles, but mathematically that is what is happening.

Find the Mean

Find the mean of each set of data:

1. 6, 3, 9, 7, 5 6

2. 1.3m, 0.7m, 2.6m, 2.3m, 0.4m, 1.7m 1.5m

3. 26, 27, 35, 18, 23, 27 26

4. £1.34, 89p, £1.57, £2.46, £2.09, 60p £1.49

What do you need to think about carefully when finding the mean with this set of data? All £ or p so 89p = £0.89

Make some sets of data for a partner to find the mean.

Answers

How Much?

Five classes of children collect some money to share equally with five local charities. Four of the classes record how much money they have collected, but the fifth class forgot to record theirs.

Here are the four classes collections: £34, £29, £18, £27.
The total is shared equally so each charity receives £25.
How much did the fifth class raise? **£17**

Write a similar problem for a partner.



Answers



Mean in Maths

Aim: To find the mean of a set of numbers.

For each set of numbers calculate the mean.

1.	6, 4, 2	
2.	10, 8, 9	
3.	5, 6, 10	
4.	10, 3, 2	
5.	7, 3, 8	
6.	8, 6, 7	
7.	6, 10, 2	
8.	2, 10, 3	
9.	4, 2, 9	
10.	5, 7, 3	
11.	8, 9, 1	
12.	15, 12, 9	
13.	11, 11, 14	
14.	10, 11, 12	
15.	10, 8, 9	

16.	7, 15, 2	
17.	3, 11, 13	
18.	4, 5, 6	
19.	15, 12, 12	
20.	11, 6, 13	
21.	13, 13, 4	
22.	18, 2, 13	
23.	14, 20, 11	
24.	13, 18, 5	
25.	7, 8, 18	
26.	6, 18, 3	
27.	16, 4, 19	
28.	19, 5, 12	
29.	11, 9, 10	
30.	13, 15, 8	

For each set of numbers calculate the value of the missing number using the given mean.

31.	6		10	with a mean of 8
32.	3	9		with a mean of 5
33.		15	7	with a mean of 11
34.	8		14	with a mean of 9
35.	7		16	with a mean of 14

Mean in Maths Answers

Aim: To find the mean of a set of numbers.

For each set of numbers calculate the mean.

1.	6, 4, 2	4
2.	10, 8, 9	9
3.	5, 6, 10	7
4.	10, 3, 2	5
5.	7, 3, 8	6
6.	8, 6, 7	7
7.	6, 10, 2	6
8.	2, 10, 3	5
9.	4, 2, 9	5
10.	5, 7, 3	5
11.	8, 9, 1	6
12.	15, 12, 9	12
13.	11, 11, 14	12
14.	10, 11, 12	11
15.	10, 8, 9	9

16.	7, 15, 2	8
17.	3, 11, 13	9
18.	4, 5, 6	5
19.	15, 12, 12	13
20.	11, 6, 13	10
21.	13, 13, 4	10
22.	18, 2, 13	11
23.	14, 20, 11	15
24.	13, 18, 5	12
25.	7, 8, 18	11
26.	6, 18, 3	9
27.	16, 4, 19	13
28.	19, 5, 12	12
29.	11, 9, 10	10
30.	13, 15, 8	12

For each set of numbers calculate the value of the missing number using the given mean.

31.	6	8	10	with a mean of 8
32.	3	9	3	with a mean of 5
33.	11	15	7	with a mean of 11
34.	8	5	14	with a mean of 9
35.	7	19	16	with a mean of 14

Mean in Maths

Aim: To find the mean of a set of numbers.

For each set of numbers calculate the mean.

1.	9, 7, 8, 8	
2.	8, 7, 9, 8	
3.	1, 2, 7, 6	
4.	2, 3, 9, 2	
5.	4, 9, 4, 7	
6.	5, 5, 8, 6	
7.	7, 1, 10, 2	
8.	3, 1, 8, 8	
9.	9, 7, 6, 2, 3	
10.	7, 10, 6, 5, 7	
11.	13, 8, 9, 8, 2	
12.	2, 8, 12, 4	
13.	15, 12, 8, 10	
14.	8, 8, 15, 1	
15.	12, 4, 7, 3	

16.	10, 11, 9, 2	
17.	9, 9, 6, 2	
18.	9, 8, 8, 1, 7	
19.	12, 13, 2, 2, 6	
20.	3, 2, 14, 9, 6	
21.	8, 9, 16, 15	
22.	8, 16, 19, 15	
23.	4, 11, 13, 15	
24.	17, 10, 16, 6	
25.	14, 15, 18, 5	
26.	9, 5, 13, 3	
27.	20, 10, 17, 20	
28.	13, 13, 5, 4, 12	
29.	3, 10, 4, 9, 18	
30.	19, 18, 3, 5, 14	

For each set of numbers calculate the value of the missing number using the given mean.

31.	14		5	11	with a mean of 12	
32.	2	20	7		with a mean of 12.25	
33.	5		5	6	7	with a mean of 6
34.	4	6	1		1	with a mean of 2.8
35.	1	17		21	6	with a mean of 11.4

Mean in Maths Answers

Aim: To find the mean of a set of numbers.

For each set of numbers calculate the mean.

1.	9, 7, 8, 8	8
2.	8, 7, 9, 8	8
3.	1, 2, 7, 6	4
4.	2, 3, 9, 2	4
5.	4, 9, 4, 7	6
6.	5, 5, 8, 6	6
7.	7, 1, 10, 2	5
8.	3, 1, 8, 8	5
9.	9, 7, 6, 2, 3	5.4
10.	7, 10, 6, 5, 7	7
11.	13, 8, 9, 8, 2	8
12.	2, 8, 12, 4	6.5
13.	15, 12, 8, 10	11.25
14.	8, 8, 15, 1	8
15.	12, 4, 7, 3	6.5

16.	10, 11, 9, 2	8
17.	9, 9, 6, 2	6.5
18.	9, 8, 8, 1, 7	6.6
19.	12, 13, 2, 2, 6	7
20.	3, 2, 14, 9, 6	6.8
21.	8, 9, 16, 15	12
22.	8, 16, 19, 15	14.5
23.	4, 11, 13, 15	10.75
24.	17, 10, 16, 6	12.25
25.	14, 15, 18, 5	13
26.	9, 5, 13, 3	7.5
27.	20, 10, 17, 20	16.75
28.	13, 13, 5, 4, 12	9.4
29.	3, 10, 4, 9, 18	8.8
30.	19, 18, 3, 5, 14	11.8

For each set of numbers calculate the value of the missing number using the given mean.

31.	14	18	5	11	with a mean of 12	
32.	2	20	7	20	with a mean of 12.25	
33.	5	7	5	6	7	with a mean of 6
34.	4	6	1	2	1	with a mean of 2.8
35.	1	17	12	21	6	with a mean of 11.4

Mean in Maths

Aim: To find the mean of a set of numbers.

For each set of numbers calculate the mean.

1.	1, 7, 3, 5, 6	
2.	9, 3, 4, 2, 5	
3.	4, 6, 2, 8, 2	
4.	2, 3, 4, 8, 2	
5.	8, 1, 3, 4, 1	
6.	2, 15, 13, 13, 12	
7.	14, 13, 10, 2, 10	
8.	12, 9, 13, 15, 6, 16, 17, 8	
9.	1, 11, 4, 10, 15, 18, 16, 6	
10.	12, 2, 15, 9, 15, 13, 5, 17	
11.	3, 14, 4, 1, 11	
12.	19, 10, 16, 16, 15	
13.	6, 5, 20, 20, 1	
14.	11, 6, 19, 12, 17	
15.	11, 6, 19, 12, 17	

16.	7, 19, 24, 1, 16, 27, 16, 14	
17.	3, 20, 13, 24, 4, 16, 24, 7	
18.	17, 5, 18, 3, 16, 18, 16, 2, 13, 2	
19.	10, 13, 16, 20, 19, 11, 5, 1, 10, 4	
20.	15, 18, 5, 7, 2, 24, 13, 8, 7, 15	
21.	22, 26, 20, 2, 5	
22.	28, 21, 13, 21, 28	
23.	20, 2, 7, 12, 5	
24.	14, 17, 22, 17, 1	
25.	7, 5, 16, 19, 9	
26.	26, 5, 42, 34, 42, 29, 37, 17	
27.	19, 24, 14, 37, 50, 25, 45, 29	
28.	48, 5, 14, 50, 8, 12, 38, 23, 2, 42	
29.	43, 31, 47, 37, 23, 33, 14, 19, 12, 6	
30.	22, 31, 41, 41, 21, 9, 26, 44, 17, 16	

For each set of numbers calculate the value of the missing number using the given mean.

31.	19	15		1	3	with a mean of 10.4					
32.	2	27	24	12	24	3	30	with a mean of 16.875			
33.	13	7	7		13	28	19	29	with a mean of 16.875		
34.	6	17	14	27		27	13	9	9	25	with a mean of 17.5
35.	18	20	1	21	24	9		4	28	12	with a mean of 15.3

Mean in Maths Answers

Aim: To find the mean of a set of numbers.

For each set of numbers calculate the mean.

1.	1, 7, 3, 5, 6	4.4
2.	9, 3, 4, 2, 5	4.6
3.	4, 6, 2, 8, 2	4.4
4.	2, 3, 4, 8, 2	3.8
5.	8, 1, 3, 4, 1	3.4
6.	2, 15, 13, 13, 12	11
7.	14, 13, 10, 2, 10	9.8
8.	12, 9, 13, 15, 6, 16, 17, 8	12
9.	1, 11, 4, 10, 15, 18, 16, 6	10.125
10.	12, 2, 15, 9, 15, 13, 5, 17	11
11.	3, 14, 4, 1, 11	6.6
12.	19, 10, 16, 16, 15	15.2
13.	6, 5, 20, 20, 1	10.4
14.	11, 6, 19, 12, 17	9.6
15.	11, 6, 19, 12, 17	13

16.	7, 19, 24, 1, 16, 27, 16, 14	15.5
17.	3, 20, 13, 24, 4, 16, 24, 7	13.875
18.	17, 5, 18, 3, 16, 18, 16, 2, 13, 2	11
19.	10, 13, 16, 20, 19, 11, 5, 1, 10, 4	10.9
20.	15, 18, 5, 7, 2, 24, 13, 8, 7, 15	11.4
21.	22, 26, 20, 2, 5	15
22.	28, 21, 13, 21, 28	22.2
23.	20, 2, 7, 12, 5	9.2
24.	14, 17, 22, 17, 1	14.2
25.	7, 5, 16, 19, 9	11.2
26.	26, 5, 42, 34, 42, 29, 37, 17	29
27.	19, 24, 14, 37, 50, 25, 45, 29	30.375
28.	48, 5, 14, 50, 8, 12, 38, 23, 2, 42	24.2
29.	43, 31, 47, 37, 23, 33, 14, 19, 12, 6	26.5
30.	22, 31, 41, 41, 21, 9, 26, 44, 17, 16	26.8

For each set of numbers calculate the value of the missing number using the given mean.

31.	19	15	14	1	3	with a mean of 10.4					
32.	2	27	24	12	24	3	13	30	with a mean of 16.875		
33.	13	7	7	19	13	28	19	29	with a mean of 16.875		
34.	6	17	14	27	28	27	13	9	9	25	with a mean of 17.5
35.	18	20	1	21	24	9	16	4	28	12	with a mean of 15.3

Mean

The mean is the average or norm.

Add up all of the values to find a total.

Divide the total by the number of values you added together.

$$2 + 2 + 5 + 6 + 7 + 8 = 30$$

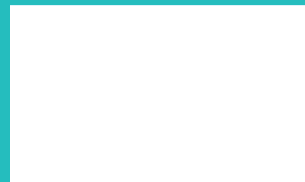
$$30 \div 6 = 5$$

The mean number is

5

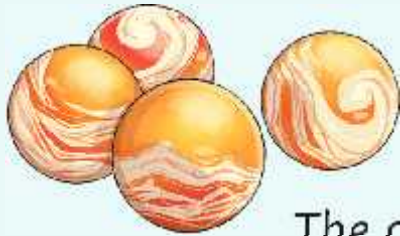
Maths Mastery

Mean Average Activities



What Is the Mean?

Five children have some marbles as shown:



Child A	10 marbles
Child B	8 marbles
Child C	5 marbles
Child D	4 marbles
Child E	3 marbles

The children decide to share the marbles equally.

Explain:

how they will do this; Put all the marbles together and share them equally.

how many marbles each child will have; There are 30 marbles to share between 5, so 6 each.

what this has to do with calculating the mean.

Answers

Calculating the mean of a set of data is to share the data equally. In many cases this cannot be done practically, as it can with the marbles, but mathematically that is what is happening.

Find the Mean

Find the mean of each set of data:

1. 6, 3, 9, 7, 5 6

2. 1.3m, 0.7m, 2.6m, 2.3m, 0.4m, 1.7m 1.5m

3. 26, 27, 35, 18, 23, 27 26

4. £1.34, 89p, £1.57, £2.46, £2.09, 60p £1.49

What do you need to think about carefully when finding the mean with this set of data? All £ or p so 89p = £0.89

Make some sets of data for a partner to find the mean.

Answers

How Much?

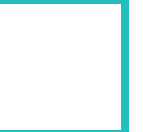
Five classes of children collect some money to share equally with five local charities. Four of the classes record how much money they have collected, but the fifth class forgot to record theirs.

Here are the four classes collections: £34, £29, £18, £27.
The total is shared equally so each charity receives £25.
How much did the fifth class raise? **£17**

Write a similar problem for a partner.



Answers



Mean

The mean is the average or norm.

Add up all of the values to find a total.

Divide the total by the number of values you added together.

$$2 + 2 + 5 + 6 + 7 + 8 = 30$$

$$30 \div 6 = 5$$

The mean number is

5