

Question 1

The mean, median and mode of the numbers in the boxes below are the same. What is the missing number?

7 7 5 7 ?

Question 2

The six-member squad for the Ladybirds five-a-side team consists of a 2-spot ladybird, a 10-spot, a 14-spot, an 18-spot, a 24-spot and a pine ladybird (on the bench). The average number of spots for members of the squad is 12. How many spots has the pine ladybird?

Question 3

Karen was given a mark of 72 for Mayhematics. Her average mark Mayhematics and Mathemagics was 78. What was her mark for Mathemagics?

Question 4

It is well known that the Pobble has no toes, and that the three-toed sloth has 12 toes (3 on each of its 4 feet). A synchronised swimming team is made up of 7 Pobbles and 5 three-toed sloths. What is the mean number of toes per team member?

Question 5

The range of a list of integers is 20, and the median is 17. What is the smallest possible number of integers in the list?

Question 6

On four tests, each marked out of 100, my average was 85. What is the lowest mark I could have scored on any one test?

Question 7

The mean score of the students who took a mathematics test was 6. Exactly 60% of the students passed the test. The mean score of the students who passed the test was 8. What was the mean score of the students who failed the test?

Question 8

What value of x makes the mean of the first three numbers in this list equal to the mean of the last four?

15 5 x 7 9 17

Question 9

Viola has been practising the long jump. At one point, the average distance she had jumped was 3.80 m. Her next jump was 3.99 m and that increased her average to 3.81 m. After the following jump, her average had become 3.82 m. How long was her final jump?

Question 10

When one number was removed from the set of positive integers from 1 to n , inclusive, the mean of the remaining numbers was 4.75. What number was eliminated?