

1. Sarah receives the following scores on her math tests: 78, 92, 83, 99, 89. What score does she need on the next test in order to have an average of 90 on her math tests?

2. Sam receives the following scores on his tests: 66, 84, 96. What average score does he need on the last *three* tests in order to get at least an 85 average?

3. The average (arithmetic mean) of 3 numbers is 60. If two of the numbers are 50 and 60, what is the third number?

4. The average (arithmetic mean) of nine numbers is 9. When a tenth number is added the average of the ten numbers is also 9. What is the tenth number?

5. In a certain game, each of the 5 players received a score between 0 and 100 inclusive. If their average (arithmetic mean) score was 80, what is the greatest possible number of the 5 players who could have received a score of 50?

6. A well-respected three point shooter in basketball is shooting 50% from three-point territory (meaning he makes 50% of his three-point shots). If he has attempted 60 three point shots thus far this season, what would his three point percentage be if he made three-fourths of the 12 shots he will attempt during the coming game?

7. A student finished six books during the past week, increasing her average number of books read per week by 1.

Assuming that the student's new average number of books read per week is 4, what is the total number of books the student has read (including this past week)?

8. The average (arithmetic mean) of the test scores of class 8G is 70, and the average of the test scores of 8Z is 92.

When the scores of both classes are combined, the average is 86. How many students are in 8G?

9. If the average (arithmetic mean) of three different positive integers is 70, what is the greatest possible value of one of the integers?