Answer on Question #43767 - Math - Algebra

The average of six numbers is 8. What seventh number must be added to increase the average to ten?

Solution:

The total of the 6 numbers is

$$6 \cdot 8 = 48$$

Adding another number will take the total to 7. So with an average of 10, the total of the 7 numbers will be

$$7 \cdot 10 = 70$$

Our seventh number

$$70 - 48 = 22$$

Answer: seventh number is 22.