Conditions

The mean age of a group of persons is 40 , another group has mean age 48, if the ratio of number of persons in two groups is 5:3, find the mean age of all the persons in two groups

Solution

We can divide all persons in two groups on eight sets with an equal number of persons in each. Then five of this sets have the mean age 40 and three – 48. We must sum 40 five times and 48 three times and divide on 8 to find the average:

$$\frac{40 + 40 + 40 + 40 + 40 + 48 + 48 + 48}{8} = \frac{344}{8} = 43$$

Answer: 43