



Geo PSAT/SAT practice Thur, April 2, 2020

13

Data set A: 72, 73, 73, 76, 76

Data set B: 61, 64, 74, 85,  $x$

Data set A and data set B each contain 5 numbers. If the mean of data set A is equal to the mean of data set B, what is the value of  $x$ ?

- A) 77
- B) 85
- C) 86
- D) 95



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ANSWER

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Data set A: 72, 73, 73, 76, 76

Data set B: 61, 64, 74, 85,  $x$

Data set A and data set B each contain 5 numbers. If the mean of data set A is equal to the mean of data set B, what is the value of  $x$ ?

- A) 77
- B) 85
- C) 86
- D) 95

since the mean is found by dividing the sum of the numbers by the amount of numbers, and both sets contain 5 items, the only way they could have the same mean is if they had the same sum.

$$\begin{aligned}
 \text{sum of Data set A} &= \text{sum of data set B} \\
 72 + 73 + 73 + 76 + 76 &= 61 + 64 + 74 + 85 + x \\
 370 &= 284 + x \\
 -284 &\quad -284
 \end{aligned}$$

$$x = 86$$

ANSWER  
is choice C