## BROTHERS' HEIGHT PUZZLE <br> CONCEPT OF 'AVERAGE' SIMPLIFIED

\#CYST \#CanYouSolveThis? \#LogicalAbilityEnhancingQuestion \#VedicMathWorld \#VMLS Question: Next door to me live four brothers of different heights. Their average height is 74 inches. Difference in height amongst first three man is two inches. The difference between the third and the fourth man is six inches. Can you tell how tall is each brother?


Heights of four brothers are let's say $A, B, C$ and $D$ respectively. Average height of four brothers is given 74 inches.

Average $=\frac{\text { Sum of given data }}{\text { total number of data }}$
Sum = Average $X$ total number
Here,
Average $=74$ inches
Total number of people $=4$
So, total sum of height of all four brothers shall be, $74 \times 4=296$.

As per the given condition in the question, if $A=M$ Then,
$B=M+2, C=M+4, D=M+10$
As,
$A+B+C+D=296$
$(M)+(M+2)+(M+4)+(M+10)=296$
$4 M+16=296$
$4 \mathrm{M}=296-16=280$
$M=70$
Thus, heights of four brothers shall be 70 inches, 72 inches, 74 inches and 80 inches respectively.

