



10. Frank's teacher asks him to write down five integers such that the median is one more than the mean, and the mode is one greater than the median. Frank is also told that the median is 10. What is the smallest possible integer that he could include in his list?

A 3 B 4 C 5 D 6 E 7

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- 10. B** The median is 10. Therefore the mode must be 11 and there must be two 11s in Frank's list. The mean is 9, so the total of the five numbers is 45. This means that the total of the two smallest integers is $45 - (10 + 2 \times 11) = 13$. The maximum size of the second largest integer is 9 so the smallest integer that Frank could include in his list is $13 - 9 = 4$.