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TIME

- 2003B 22. (B) In any twelve-hour period, there are 12 half-hour chimes and $1 + 2 + 3 + \dots + 12 = 78$ on-the-hour chimes. Hence, a twelve-hour period results in 90 chimes. Dividing 2003 by 90 yields a quotient of $22.\overline{25}$. Therefore the 2003rd chime will occur a little more than 11 days later, on March 9.

2000

25. **Answer (A):** Note that, if a Tuesday is d days after a Tuesday, then d is a multiple of 7. Next, we need to consider whether any of the years $N - 1$, N , $N + 1$ is a leap year. If N is not a leap year, the 200th day of year $N + 1$ is $365 - 300 + 200 = 265$ days after a Tuesday, and thus is a Monday, since 265 is 6 larger than a multiple of 7. Thus, year N is a leap year and the 200th day of year $N + 1$ is another Tuesday (as given), being 266 days after a Tuesday. It follows that year $N - 1$ is not a leap year. Therefore, the 100th day of year $N - 1$ precedes the given Tuesday in year N by $365 - 100 + 300 = 565$ days, and therefore is a Thursday, since $565 = 7 \cdot 80 + 5$ is 5 larger than a multiple of 7.