

Each principal of Lincoln High School serves exactly one 3-year term. What is the maximum number of principals this school could have during an 8-year period?

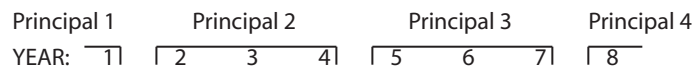
- (A) 2    (B) 3    (C) 4    (D) 5    (E) 8

**2000 AMC 8, Problem #5—**

**“The first year of the 8-year has to be the final year of a principal’s term.”**

**Solution**

**Answer (C):** If the first year of the 8-year period was the final year of a principal's term, then in the next six years two more principals would serve, and the last year of the period would be the first year of the fourth principal's term. Therefore, the maximum number of principals who can serve during an 8-year period is 4.



**Difficulty:** Hard

**NCTM Standard:** Algebra Standard for Grades 6-8 : model and solve contextualized problems using various representations, such as graphs, tables, and equations.

**Mathworld.com Classification:** Calculus and Analysis > Functions > Period  
Calculus and Analysis > Calculus > Maxima and Minima > Maximum