

The Problem

On the last day of school, Ms. Jones, the principal of George Washington High School, wanted the school's entire student body to walk together from the school's entrance to the football stadium for an awards assembly. In planning the day, she thought about having the students walk in rows of either 10, 9, 8, 7, 6, or 5 students each. But in each case, the last row only has one student based on the average daily attendance. Finally, the principal decided the students could walk to the stadium any way they wanted. Assuming that the enrollment of the high school is less than 3,000, what is the average daily attendance?



Strategies and Hints

1. How would you solve the problem if there had not been one student extra each time?
2. Solve a simpler problem, in which the principal is concerned only with rows of, say, 10 or 9?
3. Could the principal have had the students walk in pairs with no one walking alone?