

Pi Mu Epsilon Problem of the Month

February 2026

Consider seven Longwood buildings with an entrance on High Street, in consecutive order: Chichester, Jarman, Eason, Grainger, Rotunda, Tabb, and French. Find the number of subsets of this set of buildings such that no two buildings are adjacent to one another. For example: the subset $\{\text{Chichester, Eason, Grainger}\}$ wouldn't be counted, because Eason and Grainger are adjacent.

Problem of the Month Rules:

- ⌘ Submissions must include a complete mathematical or logical justification along with the answer.
- ⌘ Submissions may only be made by individuals, or groups of two, and must be dated.
- ⌘ Due date: February 24, 2026, before 5 p.m. to Dr. David Shoenthal or Dr. Steven Hoehner.

To get your own copy, please visit:
<http://www.longwood.edu/mathematics/>