

# Pi Mu Epsilon

## Problem of the Month

### April 2017

Suppose 4 dots all start moving with constant speed 2 meters per second along the same horizontal line. Whenever two dots collide, those two instantly switch directions. If the two end dots initially move toward each other and are 24 meters apart, how long will it be until no more dots collide?

Problem of the Month Rules:

- ⌘ Submissions must include a complete mathematical justification along with the answer.
- ⌘ Submissions may only be made by individuals or groups of two and must be dated.
- ⌘ Due date: April 27, 2017 before 5 p.m.; they may be given to Dr. Phillip Poplin or Dr. David Shoenthal.

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