

# Warm-Up: Fuse Timers

Prepared by Mark on February 15, 2026

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**Problem 1:**

Suppose we have two strings and a lighter. Each string takes exactly an hour to fully burn. However, we do not know how fast each part of the string burns: half might burn in 1 minute, and the rest could take 59.

How can we measure exactly 45 minutes using these two strings?