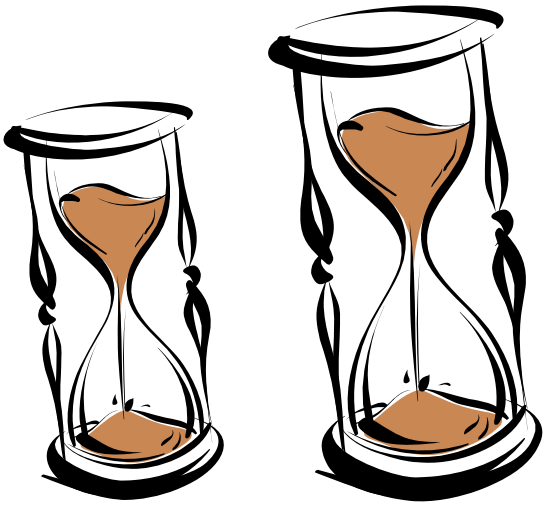
Brian's Puzzle of the Week: 2



You are given two egg timers that measure *3 minutes* and *5 minutes*, respectively.

- Using these two egg timers, you want to take a shower that lasts exactly 4 minutes.
  How can this be done?

- What is the least amount of time required to take your 4-minute shower, measured from the moment you start one of the timers?

- Show that it is possible, using these two egg timers, to take an n-minute shower, for all $n \in \mathbb{N}$.

- For each $n \in \mathbb{N}$, what is the least amount of time required to take an n-minute shower, measured from the moment you start one of the timers?