



# Problem of the Week

## Problem E

### Ahead of It's Time

A stopped watch may be useless but at least it shows the correct time twice a day. A “good” watch which gains or loses time each day, shows the correct time far less often.

When Jeff received a pocket watch from his Grandmother on his 12<sup>th</sup> birthday it was set at precisely the correct time. However, Jeff soon discovered that his watch gained exactly 10 seconds every day.

Assuming that Jeff never adjusts his watch to correct the time, how many times after his 12<sup>th</sup> birthday and before his 90<sup>th</sup> birthday will his watch show the correct time?

