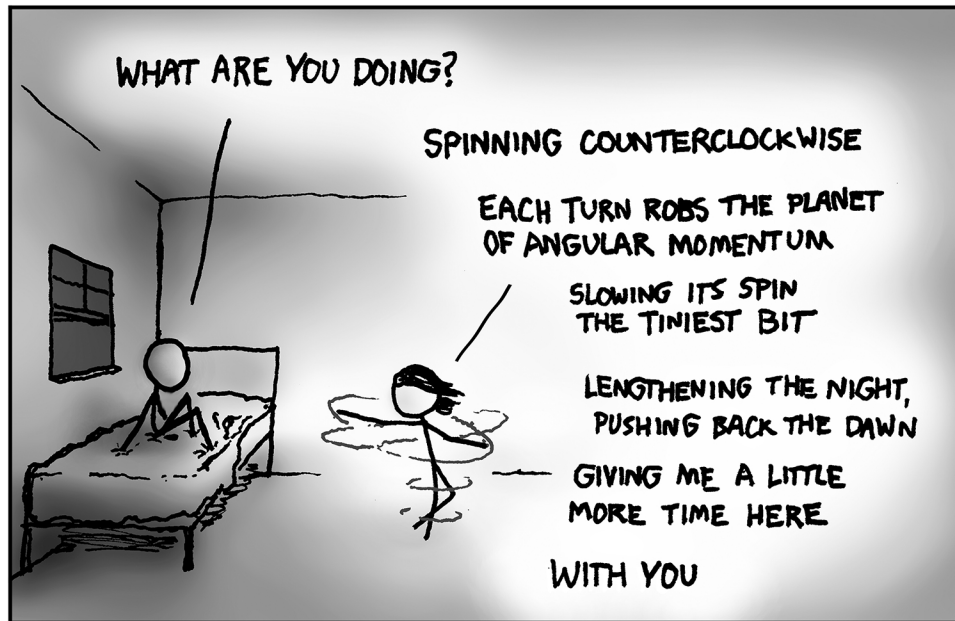


$$t_{\text{gained}} = \frac{I_{\text{girl}}}{I_{\text{earth}}} n \times \text{day} \approx \frac{60 \text{ kg} \times (30 \text{ cm})^2}{M_{\text{earth}} r_{\text{earth}}^2} n \times 1 \text{ day} \approx_{(n=1)} 10^{-35} \text{ seconds/turn}$$



With reasonable assumptions about latitude and body shape, how much time might she gain them? Note: whatever the answer, sunrise always comes too soon. (Also, is it worth it if she throws up?)

$$\begin{bmatrix} \cos 90^\circ & \sin 90^\circ \\ -\sin 90^\circ & \cos 90^\circ \end{bmatrix} \begin{bmatrix} a_1 \\ a_2 \end{bmatrix} = \begin{bmatrix} 0 & 0 \end{bmatrix}$$

In fact, draw all your rotational matrices sideways. Your professors will love it! And then they'll go home and shrink.

I CAN'T COUNT HOW MANY PEOPLE HAVE WRITTEN IN TO TELL ME THE DIRECTION OF ROTATION IS WRONG HERE. THEY SHOULD CHECK THE SIGNS MORE CAREFULLY.

↑
("SHRINK" IN THE TITLE-TEXT, HOWEVER, WAS A TYPO. IT WAS SUPPOSED TO BE "DRINK," BUT I'VE LEFT IT BECAUSE OF $\begin{pmatrix} 1 \\ i \end{pmatrix} \begin{bmatrix} a_1 \\ a_2 \end{bmatrix}$)