

$$V_{\text{subf}} = S/10 = \frac{[2\pi r^2] + [2\pi r h]}{10} = \frac{2\pi * 10^2 + 2\pi * 10 * 50}{10} = 376.8$$

$$I_B = 100/12 * 30 = 0.28 \text{ day}^{-1}$$