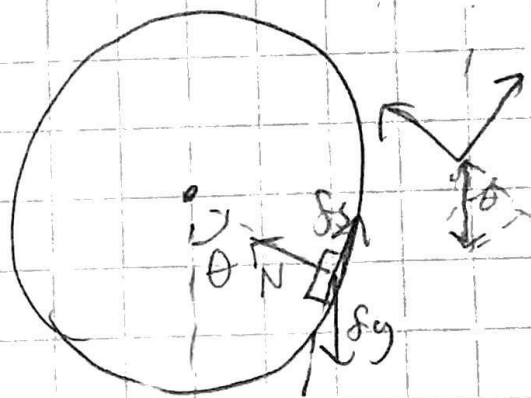


4.

$$\mu_s = 0,75$$

$$R = 0,4$$



$$T = 2 \text{ rev/s}$$

$$\omega = 4\pi \text{ rad/s}$$

$$\sum F_y = m a_r$$

$$\sum F_x = 0$$

$$N - m g \cos \theta = m a_r$$

$$0 = f_s - m g \sin \theta$$

$$N = m g \cos \theta + m a_r$$

$$0 = \mu_s (m g \cos \theta + m a_r) - m g \sin \theta$$

$$\mu_s a_r = g \sin \theta - \mu_s g \cos \theta$$

$$\mu_s \omega^2 R = g \sin \theta - \mu_s g \cos \theta$$