Theoretical Mechanics, Quiz 2: ROT
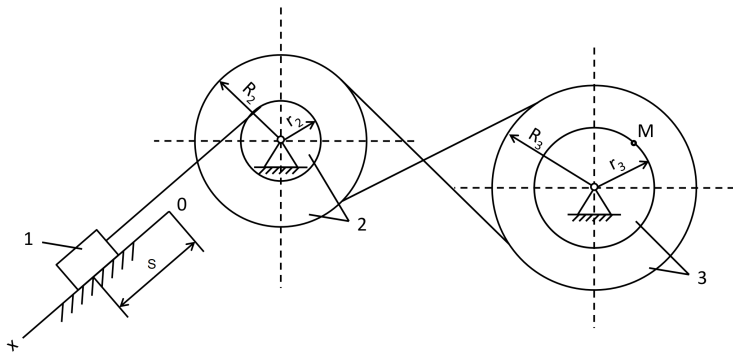
Rotation motion

All radii, s (passed distance by block **1**) and the motion law of the block $x(t) = 2 + 70t^2$ are given.

Derive $t, \vec{v}_M, \quad \vec{a}_M^n, \quad \vec{a}_M^\tau, \quad \vec{a}_M$ (show on the figure).

Quiz 2, Task 1

Tip: firstly, you need to find a time from s and x(t)