$$\overrightarrow{\Gamma_{G\epsilon S/0}} = \ddot{y}.\vec{y} = a.\vec{y}$$

$$\overrightarrow{V_{M\in S/R}} = \left.\frac{d(R.\cos\theta.\vec{x}+R.\sin\theta.\vec{y})}{dt}\right|_R = R.\dot{\theta}.(-\sin\theta.\vec{x} + \cos\theta.\vec{y}) = R.\dot{\theta}.\vec{y}_1$$