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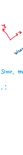
1. Problem 01 :

The ring slides with a velocity of magnitude $1.5\,\frac{m}{s}$ on a rod inclined to horizontal from what angle θ the $60°$ wedge must slide so that it will be continuously on block friction is $\mu_k = 0.5$, consider the acceleration due to gravity to be $10\,\frac{m}{s^2}$

$r = 300\,mm$
$m = 1.5\,kg$
$\mu_k = 0.5$

Solution:


F_{rod}
F_{wedge}
θ
θ
$\theta