

# ME 222: Kinematics of Machines and Mechanisms

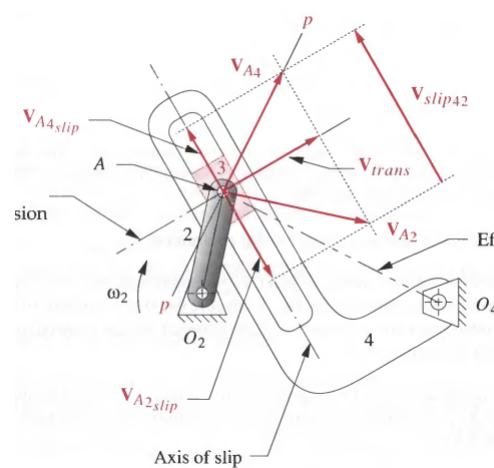
## [L23] Velocity Analysis-2

3/14/19

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## VELOCITY OF SLIP



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## Inversion of Slider Crank Mechanism

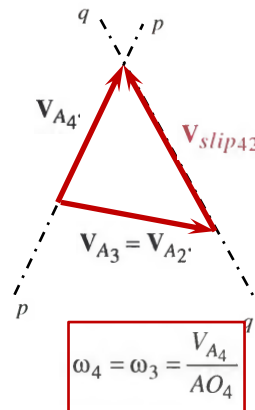
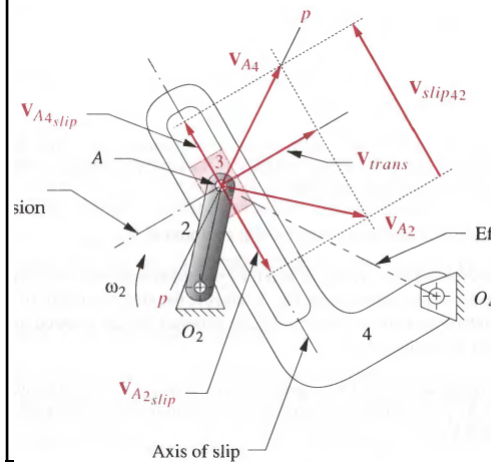
Given  $\theta_2, \theta_3, \theta_4, \omega_2$ ,

find  $\omega_3, \omega_4, V_A$ ,

$$v_{A_2} = (AO_2)\omega_2$$

$$V_{A_3} = V_{A_2'}$$

$$V_{A_4'} = V_{A_2'} + V_{slip42}$$



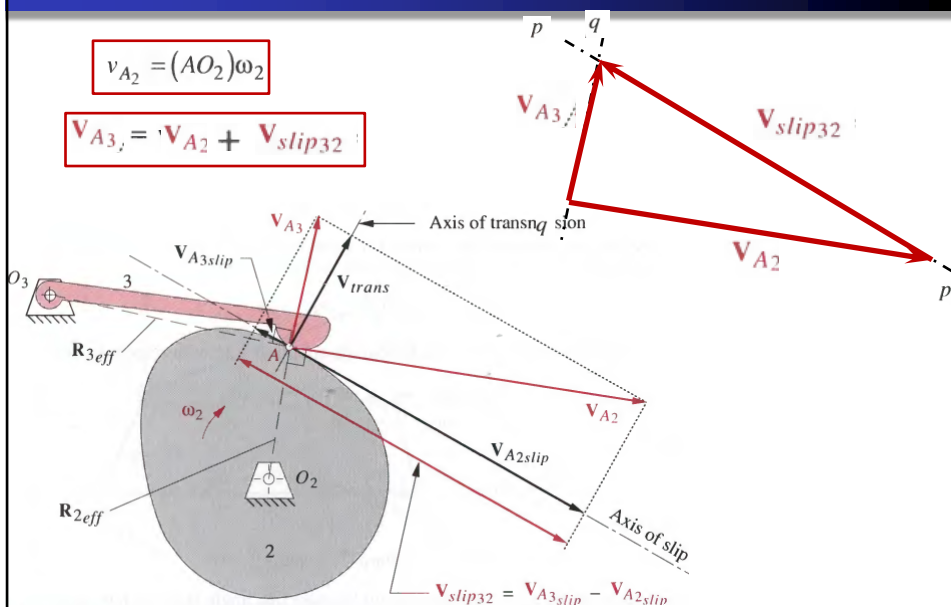
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## Cam and follower

$$v_{A_2} = (AO_2)\omega_2$$

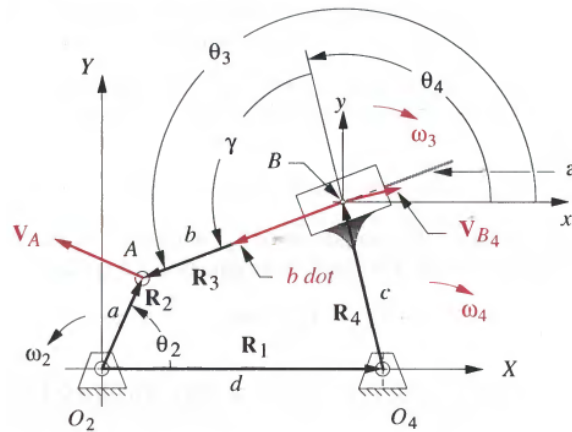
$$V_{A_3'} = V_{A_2} + V_{slip32}$$



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## Homework [6.8(row b), 6.9 (row b)]



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# Thank you

Next Class: **Velocity Analysis - 3**

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