

MECH 230 Dynamics

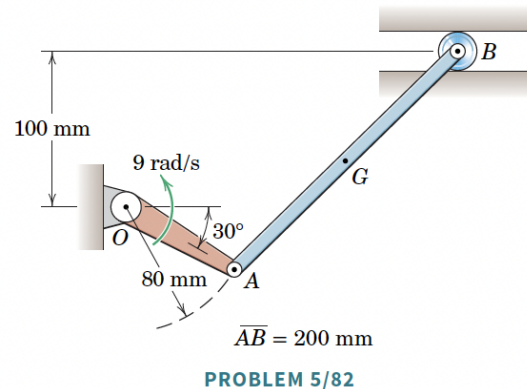
Homework 7

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Due Wednesday November 13, 2024

1. Read the problem statement of MKB 5/082.

5/82 The mechanism of Prob. 5/81 is now shown in a different position, with the crank OA 30° below the horizontal as illustrated. Determine the angular velocity ω of link AB and the velocity of roller B .



2. Calculate $\mathbf{r}_{A/O}$ at the instant depicted.
3. By looking at the rigid link OA , calculate \mathbf{v}_A .
4. Calculate $\mathbf{r}_{B/A}$ at the instant depicted.
5. By looking at the rigid link AB , calculate \mathbf{v}_B and ω_{AB} , the angular velocity of link AB .
6. On a sketch, indicate the location of the center of rotation of link AB at the instant detected.