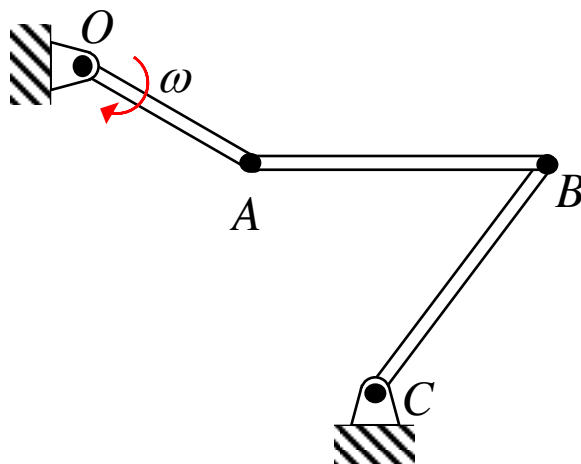


Homework H.2.H

Consider the four mechanisms shown below. Respond to the questions posed. Feel free to draw directly on these sheets and submit for your homework solution. Use a straight edge when making your drawings.

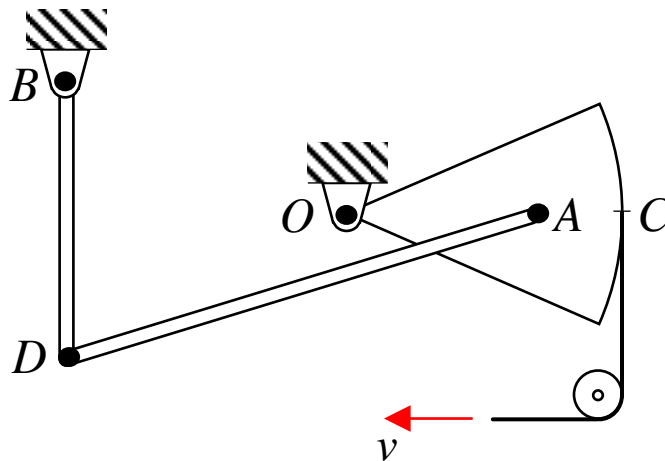
MECHANISM NO. 1

Link OA is rotating in the clockwise sense. Determine the location of the instant center (IC) of link AB. From the location of this IC, determine the sense of rotation for links AB and BC. Justify your answers in words.



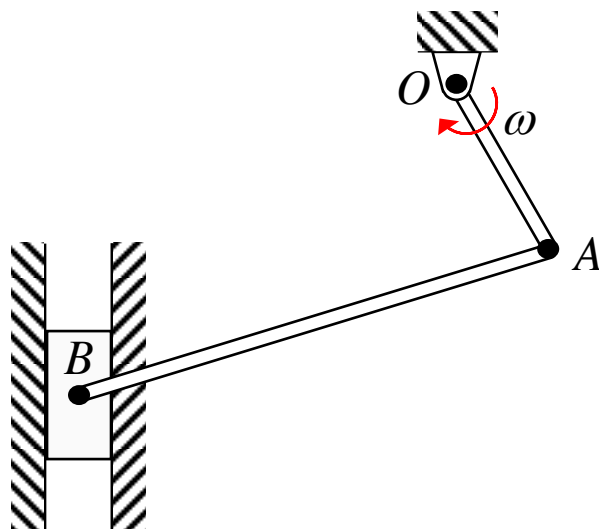
MECHANISM NO. 2

Determine the location of the instant center (IC) of link AD. From the location of this IC, determine the sense of rotation for links AD and DB. Justify your answers in words.



MECHANISM NO. 3

Link OA is rotating in the clockwise sense. Determine the location of the instant center (IC) of link AB. From the location of this IC, determine the sense of rotation for link AB and the sense of translation for the piston. Justify your answers in words.



MECHANISM NO. 4

Racks A and B are moving in the directions shown with the speeds provided. Assume that the gear does not slip on the racks. Determine the location of the instant center (IC) of the gear. From the location of this IC, determine the sense of rotation for the gear. Justify your answers with numbers and words.

