

Figure 2.1 Path of a point on a fixed plane.

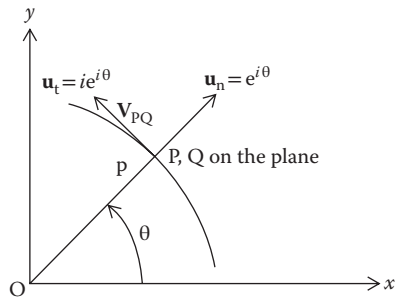


Figure 2.2 Tangential and normal components.

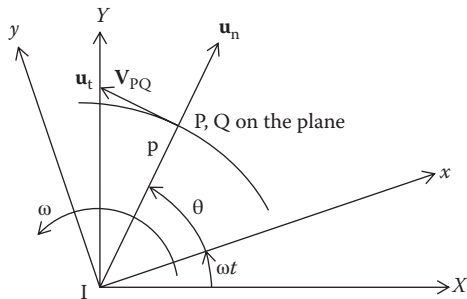


Figure 2.3 Motion of a point on a rotating plane.

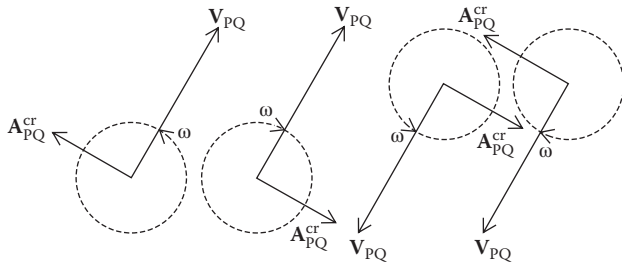


Figure 2.4 Direction of the Coriolis components.

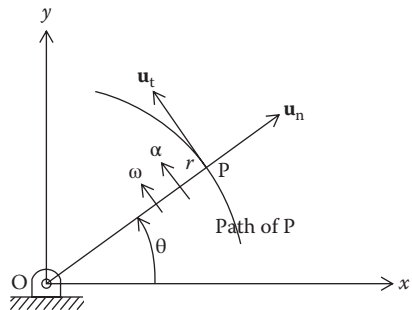


Figure 2.5 Kinematics of a rotating link.

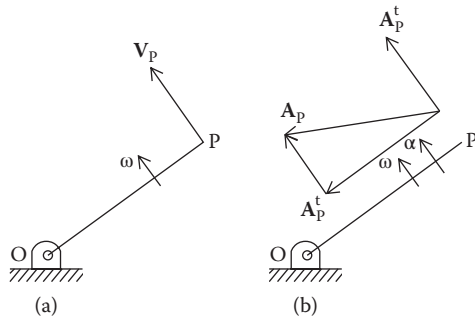


Figure 2.6 (a) Velocity of a rotating link (b) acceleration of a rotating link.

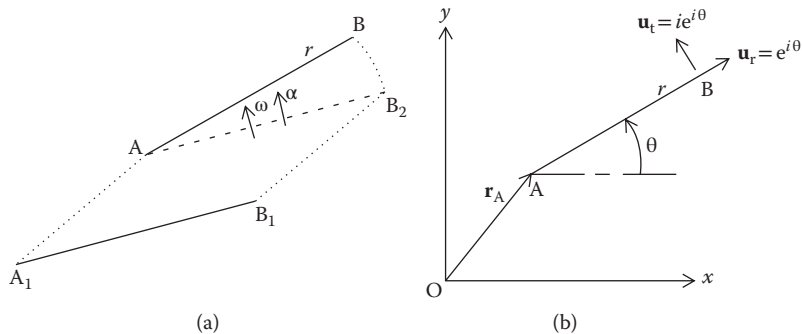


Figure 2.7 Kinematics of a floating link. (a) Representation of the equivalent motion (b) velocity and acceleration of a point on a floating link.

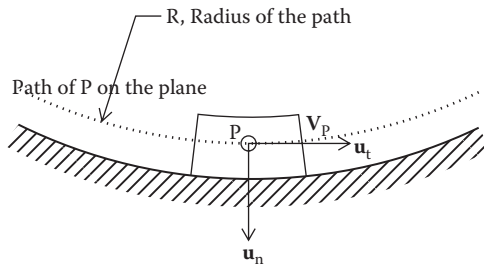


Figure 2.8 Motion of a slider on a fixed curved surface.



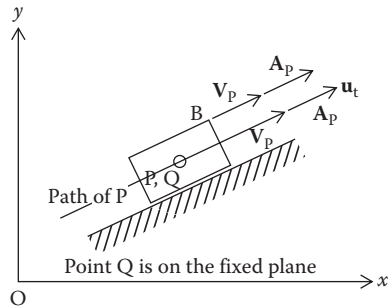


Figure 2.9 Motion of a slider on a flat surface.

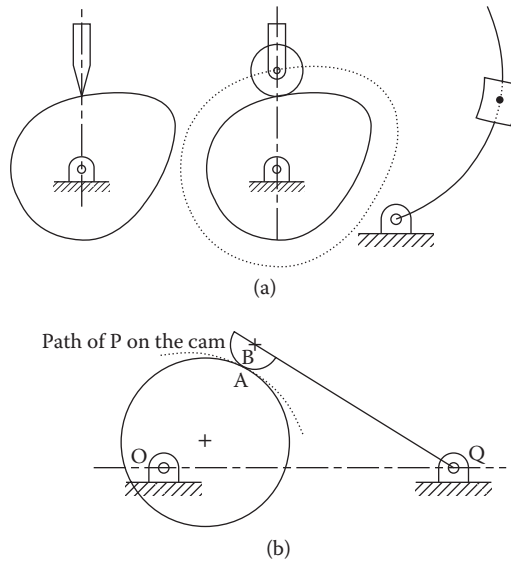


Figure 2.10 Sliding motion relative to rotating links. (a) Predetermined path (b) path is to be determined.

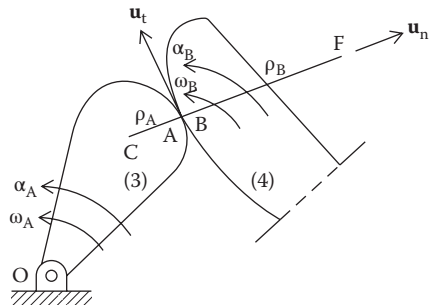


Figure 2.11 Representation of Mostafa's theory.

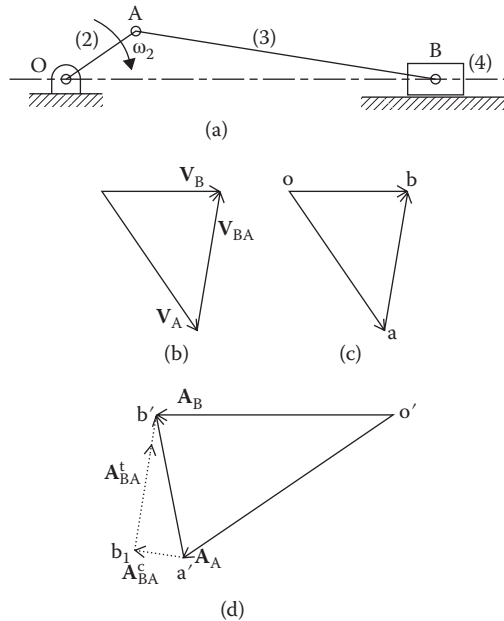


Figure 2.12 (a) Engine mechanism (b) vector velocity polygon (c) velocity polygon using notations (d) acceleration polygon.

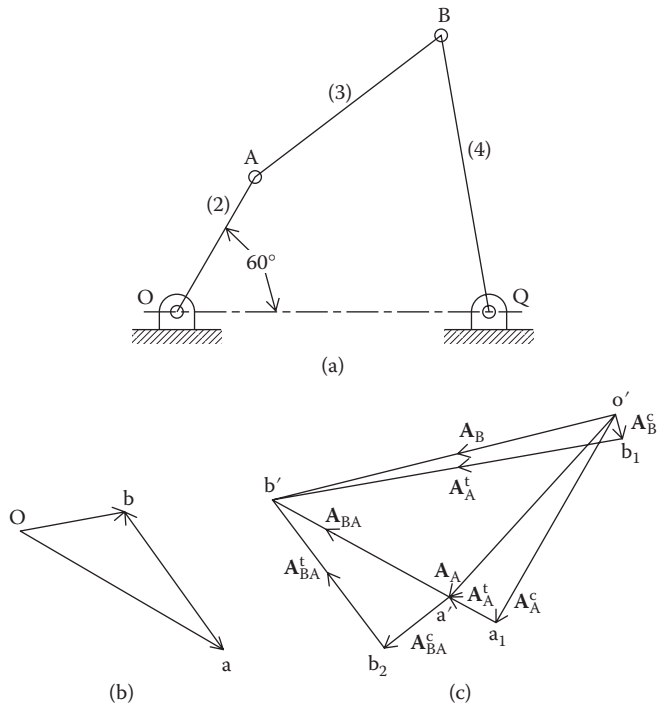


Figure 2.13 (a) Four-bar mechanism (b) velocity polygon (c) acceleration polygon.

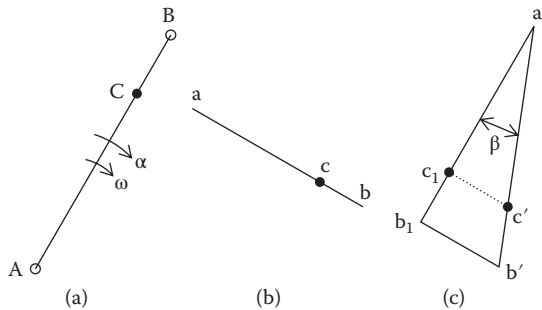


Figure 2.14 (a) A general link (b) velocity image (c) acceleration image.

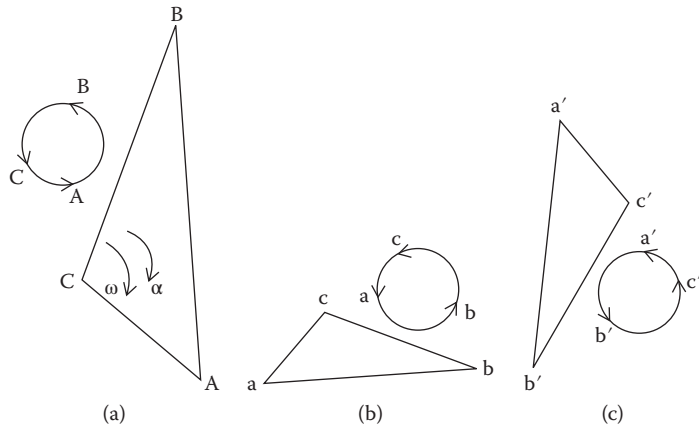


Figure 2.15 Orientation of the velocity and acceleration images. (a) The link (b) velocity image (c) acceleration image.

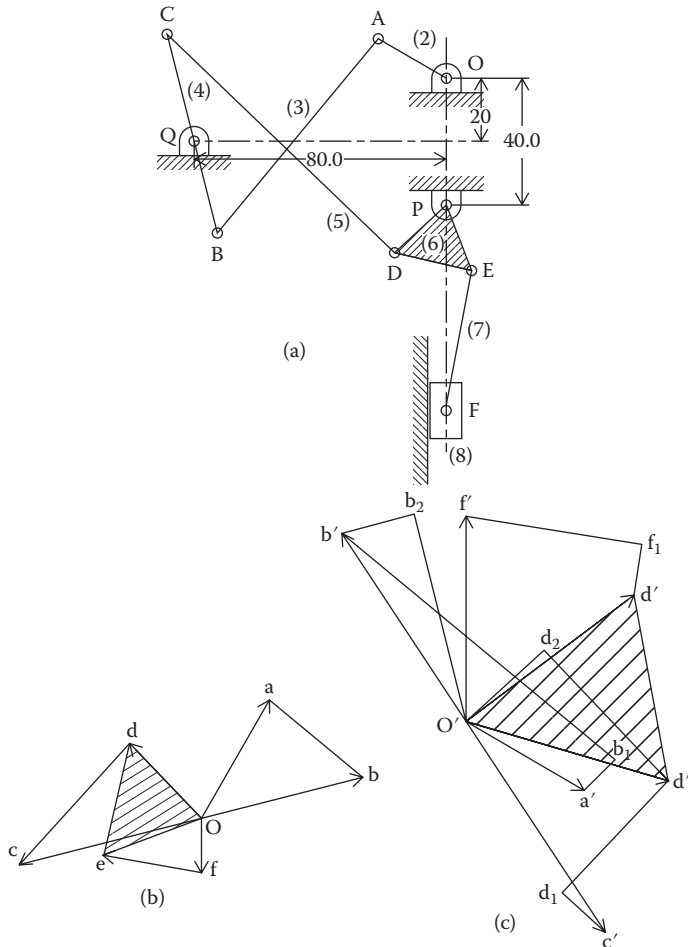


Figure 2.16 Velocity and acceleration polygons of a compound mechanism. (a) Mechanism (b) velocity polygon (c) acceleration polygon.



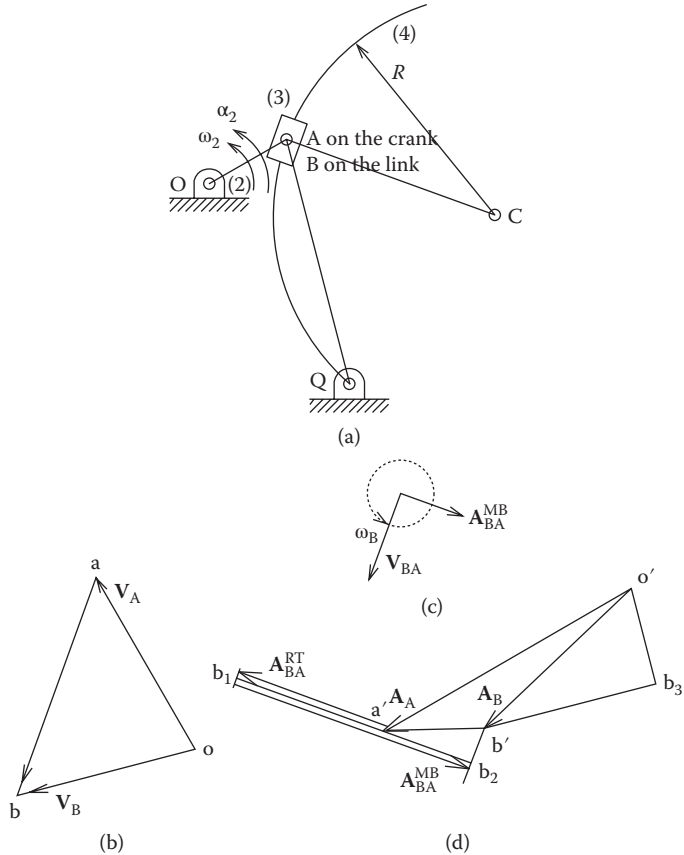


Figure 2.17 Velocity and acceleration polygons of the shaper mechanism. (a) Mechanism (b) velocity polygon (c) determination of the M-components (d) acceleration polygon.

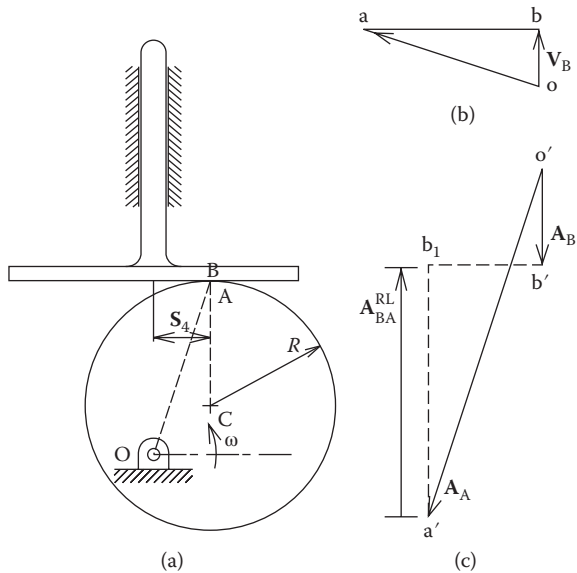


Figure 2.18 Velocity and acceleration polygons of a cam with translating flat-faced follower. (a) Cam mechanism (b) velocity polygon (c) acceleration polygon.

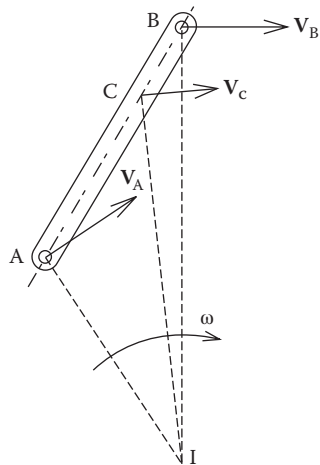


Figure 2.19 Instantaneous center of a link.

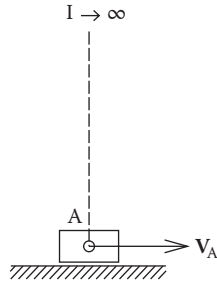


Figure 2.20 Instantaneous center of a sliding link.

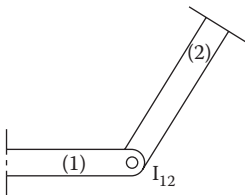


Figure 2.21 Instantaneous center of a pair of links.

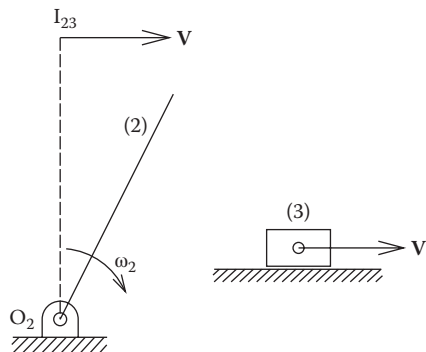


Figure 2.22 Instantaneous center of two general links.

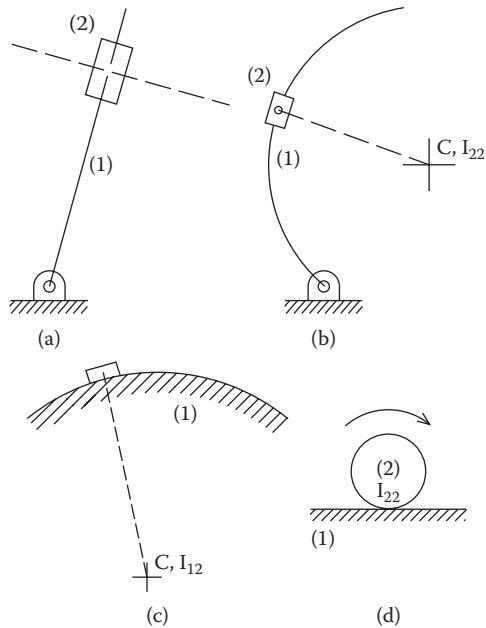


Figure 2.23 Instantaneous center of sliding and rolling links. (a) Straight link (b) curved link (c) curved link (d) rolling motion.

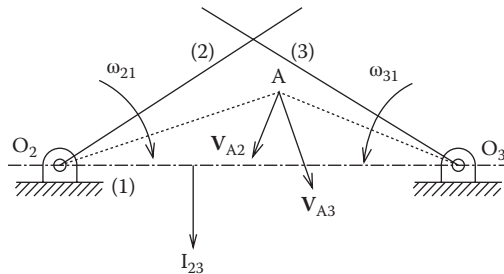


Figure 2.24 Representation of the law of three centers.



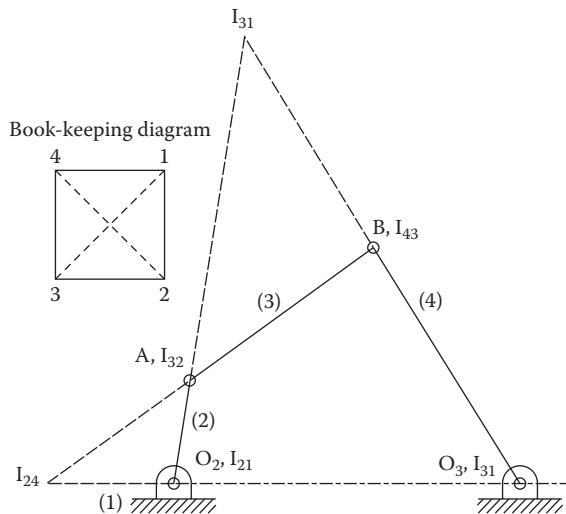


Figure 2.25 Instantaneous center of a four-bar mechanism.

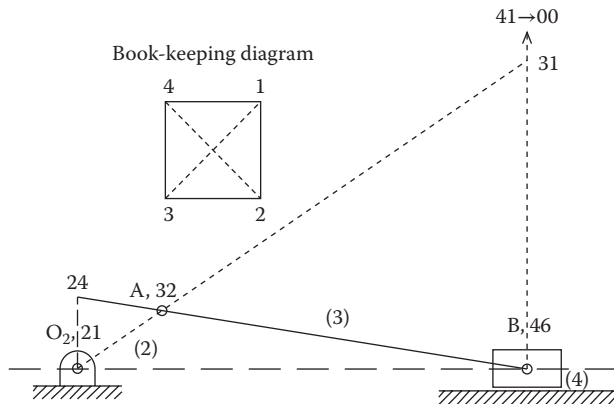


Figure 2.26 Instantaneous centers of an engine mechanism.

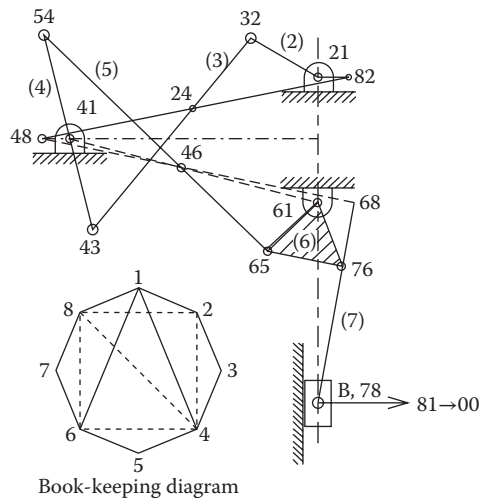


Figure 2.27 Instantaneous centers of a compound mechanism.

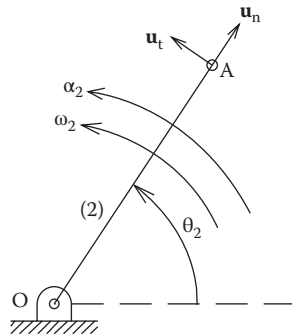


Figure 2.28 Analysis of the crank.

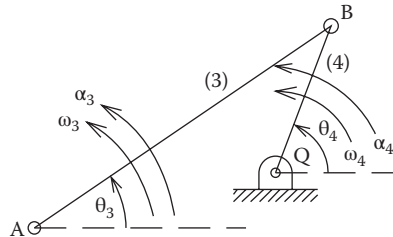


Figure 2.29 Analysis of the four-bar chain.

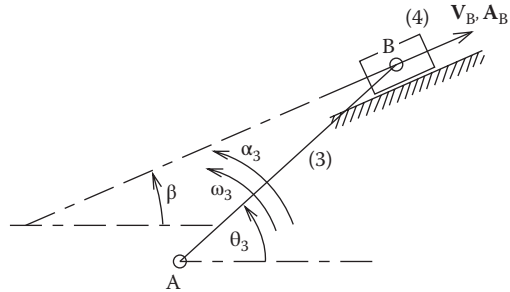


Figure 2.30 Analysis of the engine chain.

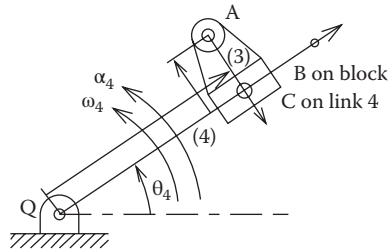


Figure 2.31 Analysis of the shaper chain.

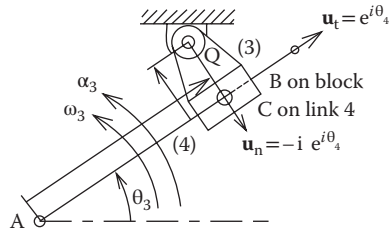


Figure 2.32 Analysis of the tilting block chain.



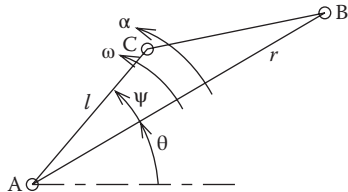


Figure 2.33 Analysis of a general link.

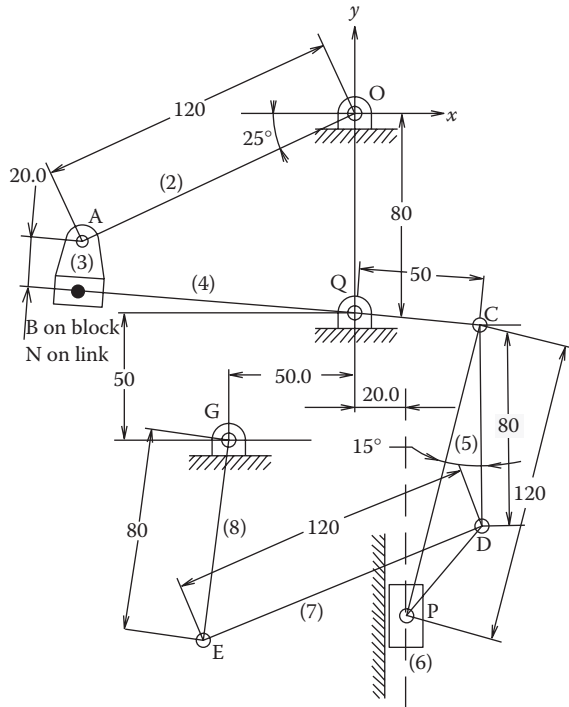


Figure 2.34 Analysis of a compound mechanism.

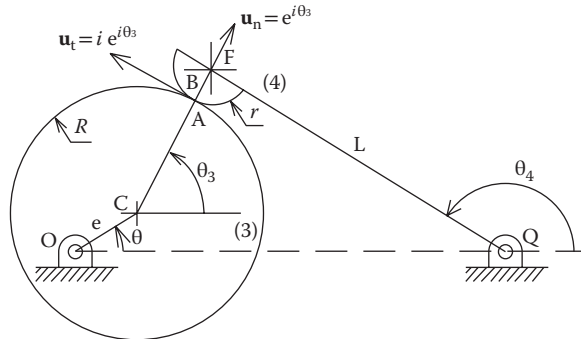


Figure 2.35 A cam with a spherical oscillating follower.

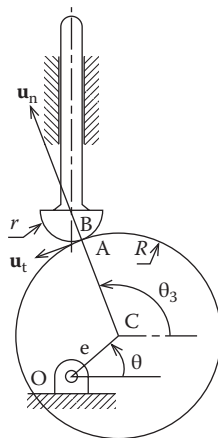


Figure 2.36 A cam with translating spherical follower.

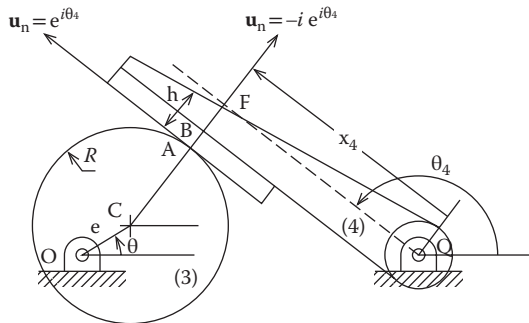


Figure 2.37 A cam with oscillating flat-faced follower.

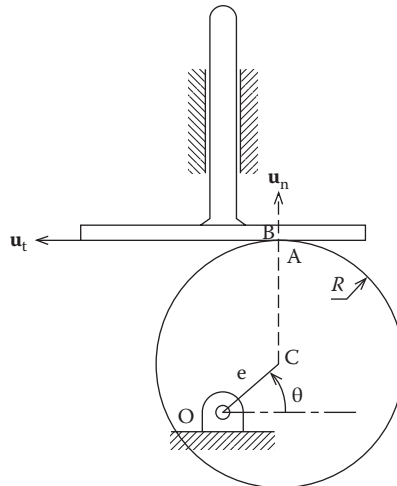


Figure 2.38 A cam with translating flat-faced follower.

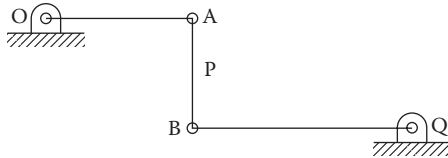


Figure P2.9

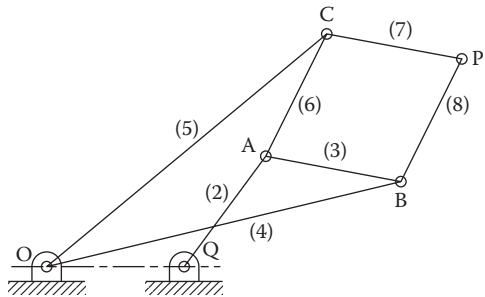


Figure P2.10



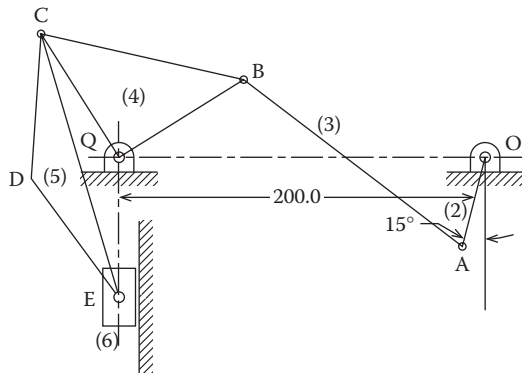


Figure P2.11

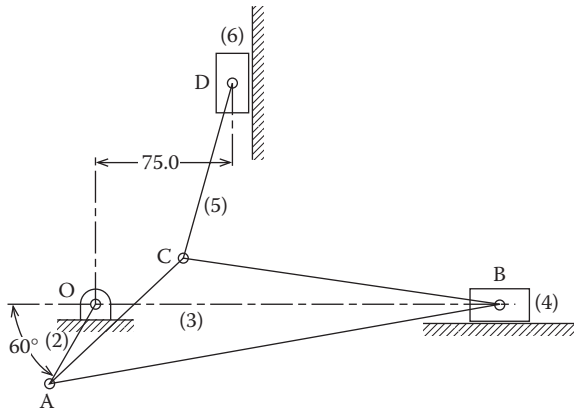


Figure P2.12

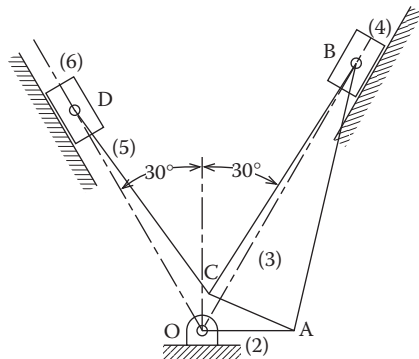


Figure P2.13

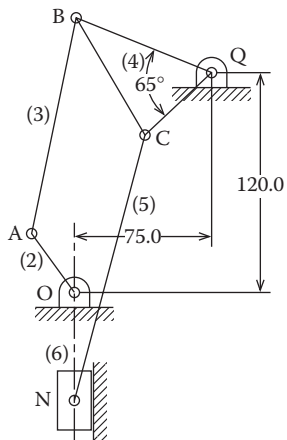


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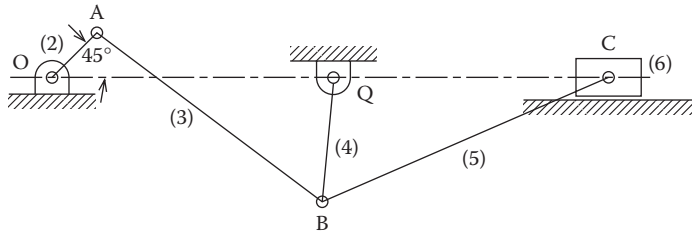


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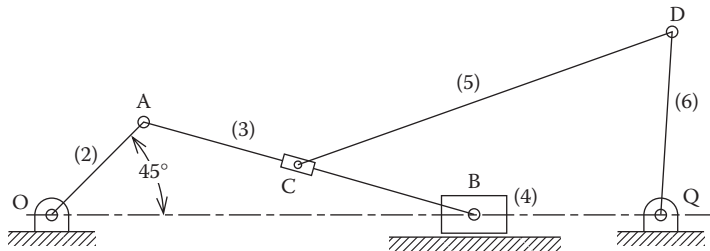


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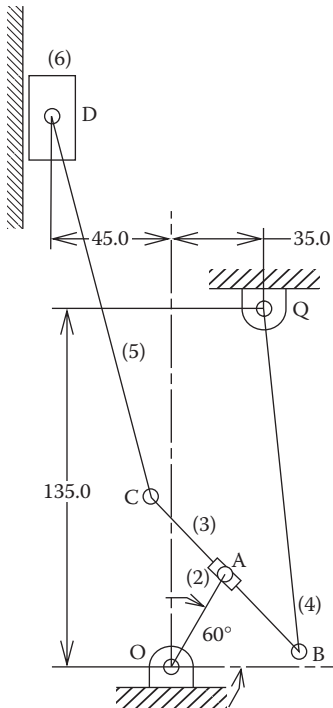


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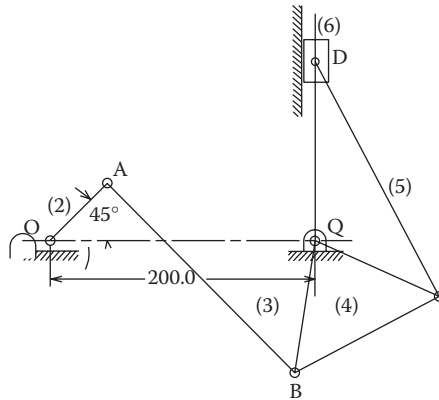


Figure P2.18



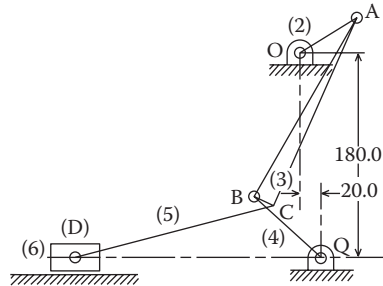


Figure P2.19

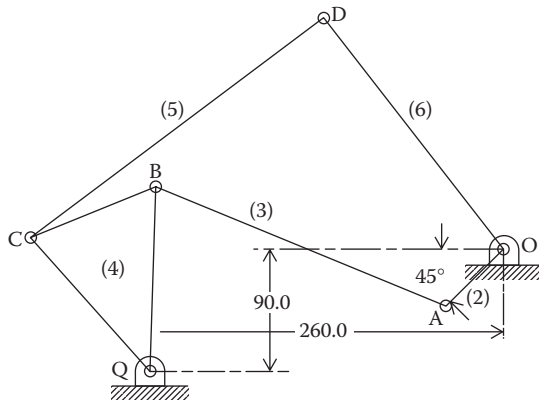


Figure P2.20

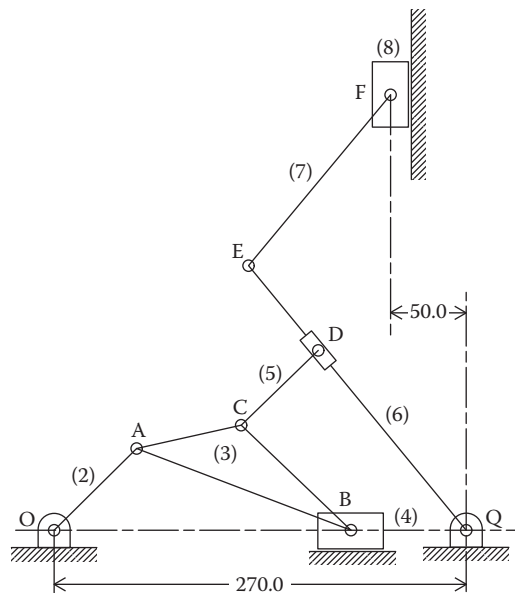


Figure P2.21

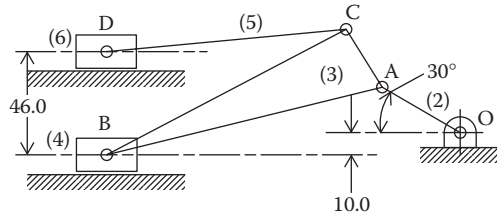


Figure P2.22

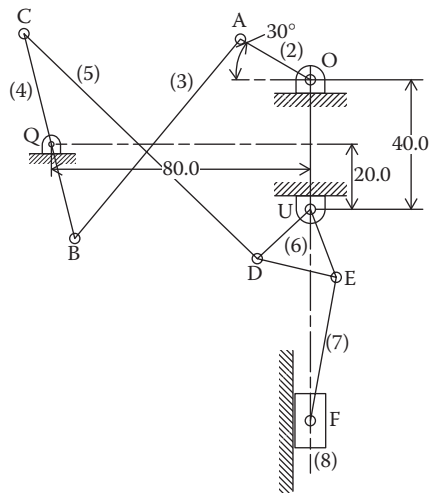


Figure P2.23

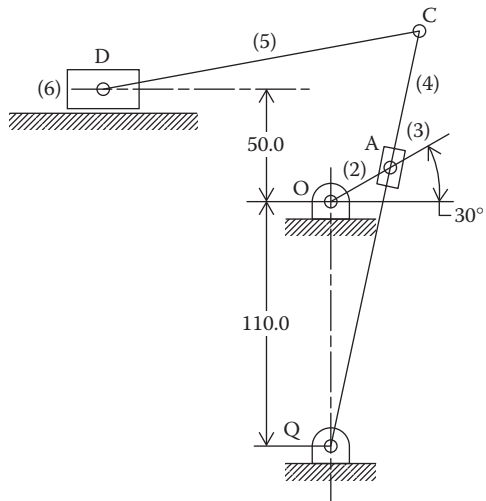


Figure P2.24

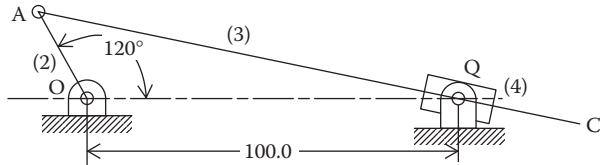


Figure P2.25

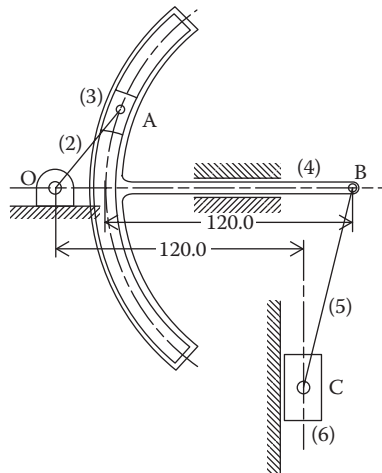


Figure P2.26



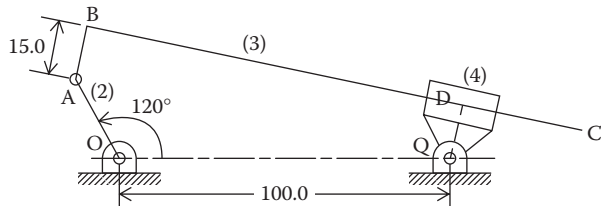


Figure P2.27

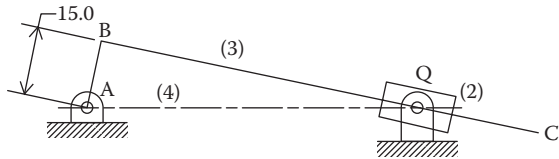


Figure P2.28

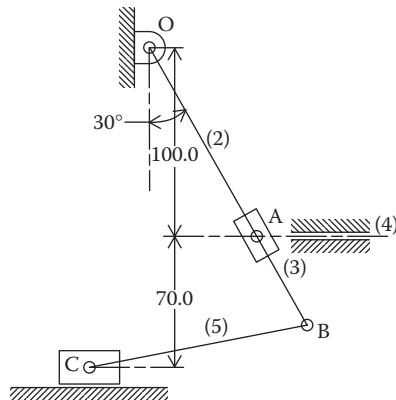


Figure P2.29

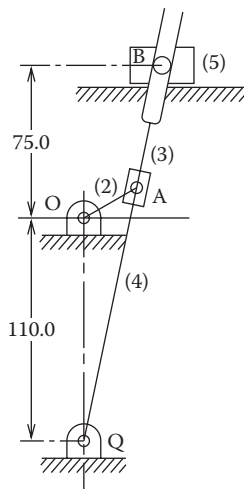


Figure P2.30

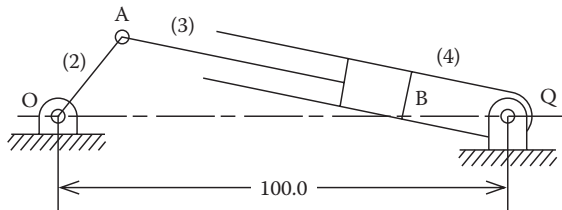


Figure P2.31

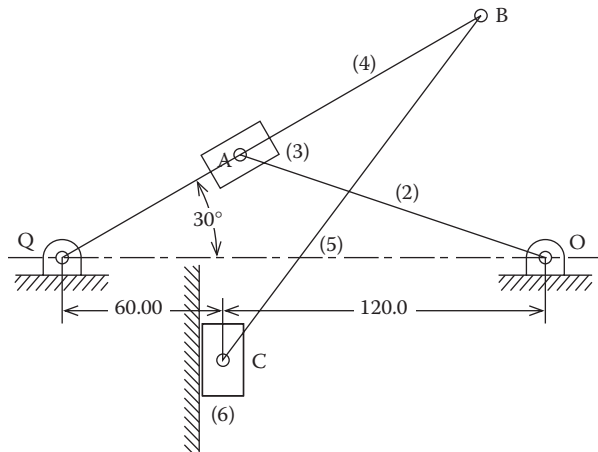


Figure P2.32

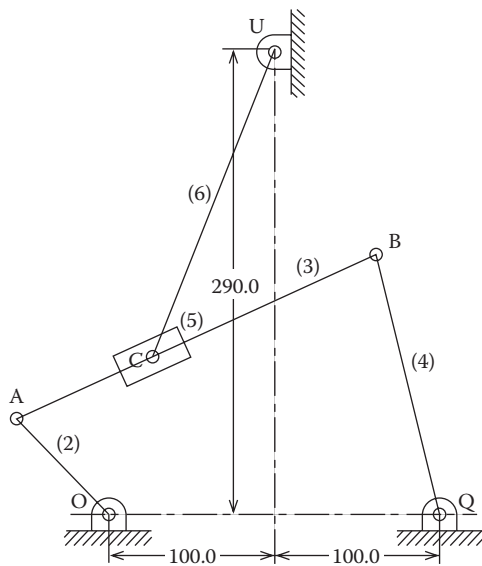


Figure P2.33

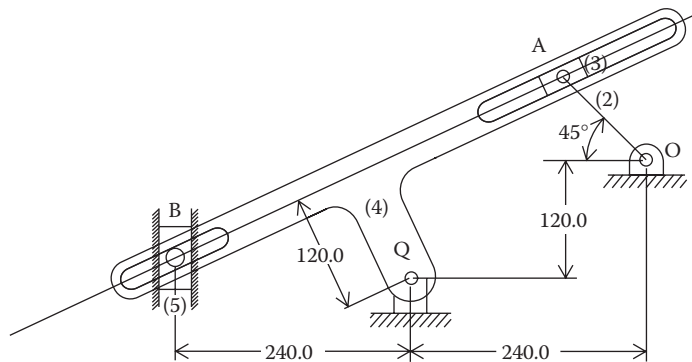


Figure P2.34



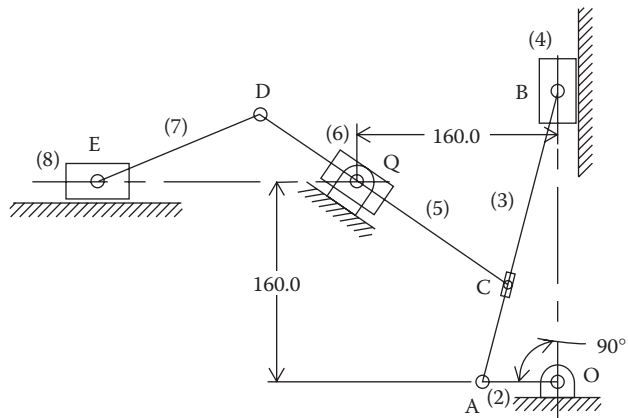


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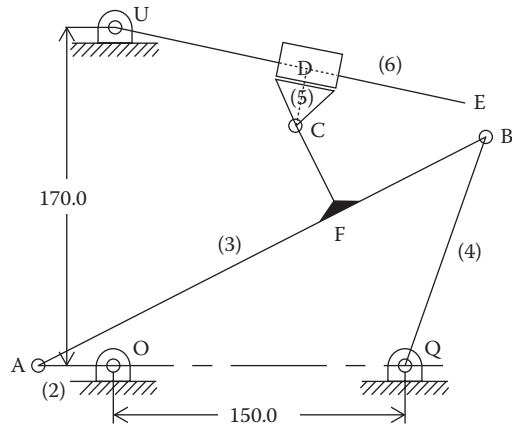


Figure P2.36

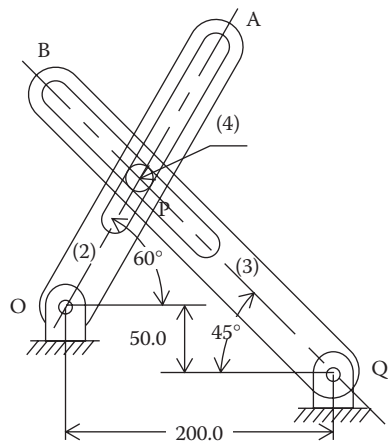


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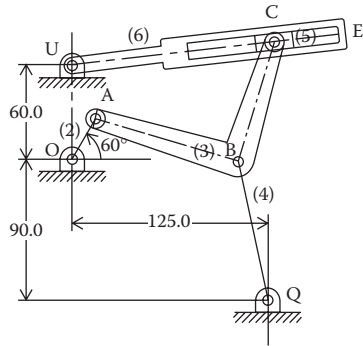


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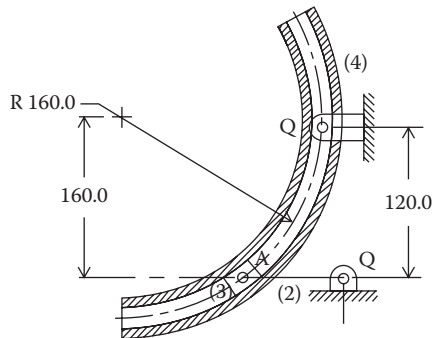


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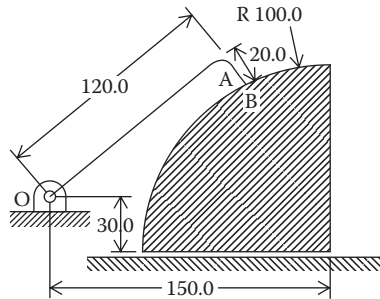


Figure P2.40

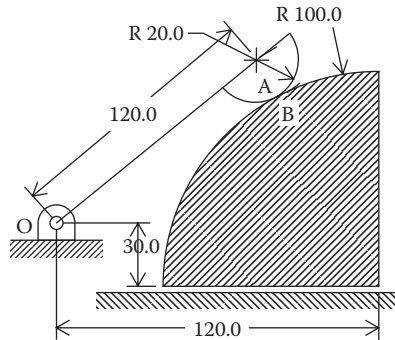


Figure P2.41

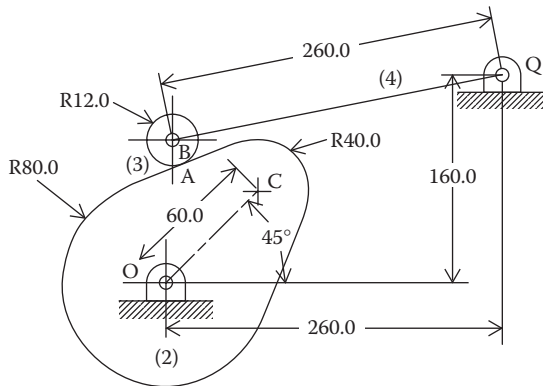


Figure P2.42



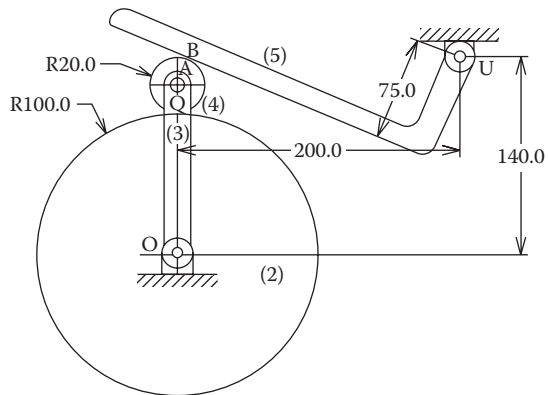


Figure P2.43

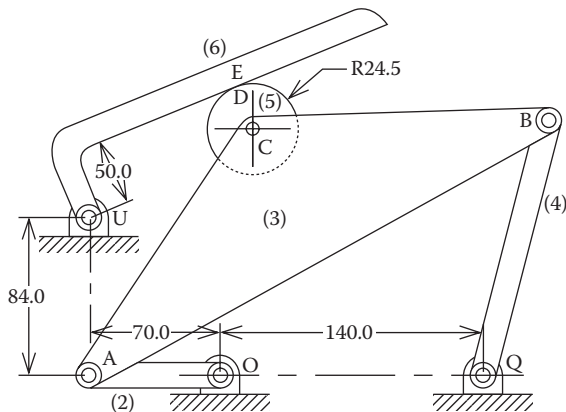


Figure P2.44

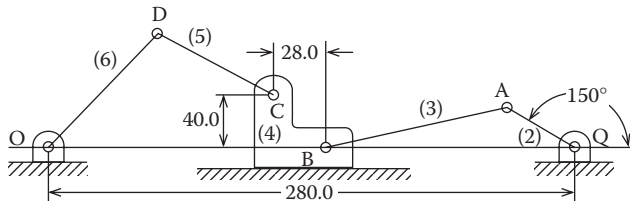


Figure P2.46