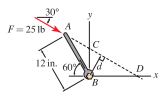


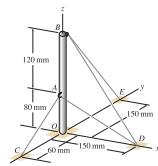
Compute the moment of force  $F$  about point  $B$ , using the following procedures.

- Determine the moment arm  $d$  and then evaluate  $M_B = Fd$ .
- Resolve force  $F$  into  $x$  and  $y$  components at point  $A$  and use the principle of moments.
- Use the principle of moments with  $F$  positioned at point  $C$ .
- Use the principle of moments with  $F$  positioned at point  $D$ .
- Use a vector approach.



Structure  $OAB$  is built in at point  $O$  and supports forces from two cables. Cable  $CAD$  passes through a frictionless ring at point  $A$ , and cable  $DBE$  passes through a frictionless ring at point  $B$ . If the force in cable  $CAD$  is 250 N and the force in cable  $DBE$  is 100 N, use a vector approach to determine

- the moment of all cable forces about point  $A$ .
- the moment of all cable forces about point  $O$ .



A trailer has a triangular door  $ABC$  hinged about edge  $BC$ . If  $\vec{Q} = (i + 4j + 8k)$  lb, determine the moment of  $Q$  about edge  $BC$ .

