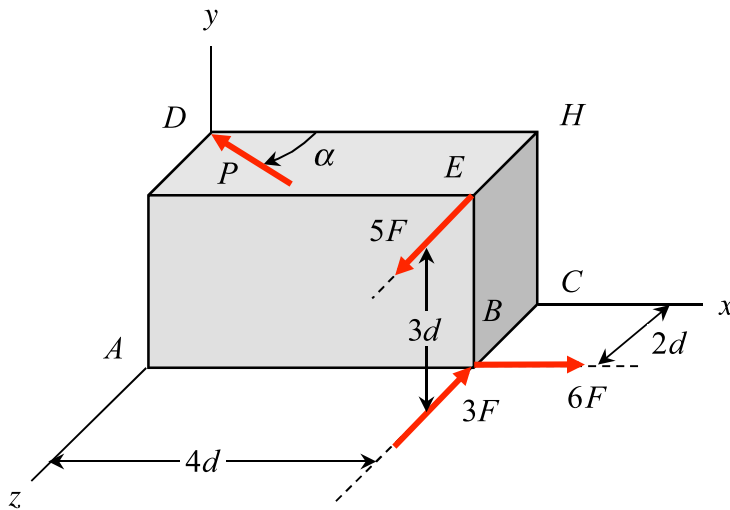


Homework H7.A

Given: A set of four forces act at corners of a parallelepiped block, as shown below.

Find:

- Determine the value of the load P and the angle α such that this set of forces is equivalent to a single couple \vec{M} . Express your answer for P in terms of F .
- Determine the value of the equivalent couple \vec{M} . Express your answer in terms of F and d .



Homework H7.B

Given: A set of three forces act on the perimeter of a circular disk, as shown.

Find: Determine the equivalent force-couple system at the circle's center O . Express your answers in terms of F and R .

