*Homework Problem H6.C*

***Given***:  A trapezoidal plate having a weight of $W$ and with its center of mass at G, is
supported by a sliding block at B and a collar at A. Block B is able to slide on
a rough, horizontal surface, whereas collar A can slide on a rough, horizontal
guide. The coefficient of static friction at both sliding surfaces is $\mu_s$. A
horizontal force $F$ acts at corner D of the plate.

***Find***:  For this problem:

a)  Determine the smallest force $F$ needed to move the plate.

b)  What is the impending motion of the plate: tipping or slipping?

For this problem, use the following parameters: $d = 0.2$ m, $h = 0.6$ m, $c = 0.4$ m, $W = 200$ N and $\mu_s = 0.4$.