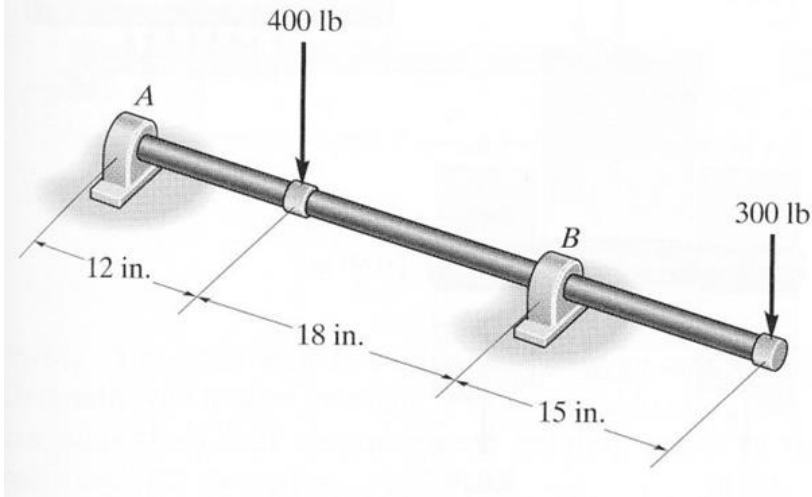


StarID or TechID (no names) _____

Do one of the two problems shown below (the second problem is on the back).

Show your work (you will not receive any credit if all you have is a final answer, right or wrong).

1. Determine the maximum bending stress in the 1.5 inch diameter solid shaft which is subjected to the concentrated forces shown. The supports at A and B exert only vertical reactions on the shaft.



2. For section n-n (1 ft from the left end of the beam), determine the shearing stress in the beam at point a (1 inch from the top of the beam). (a pin support is shown on the left end of the beam and a roller support is shown on the right end of the beam)

