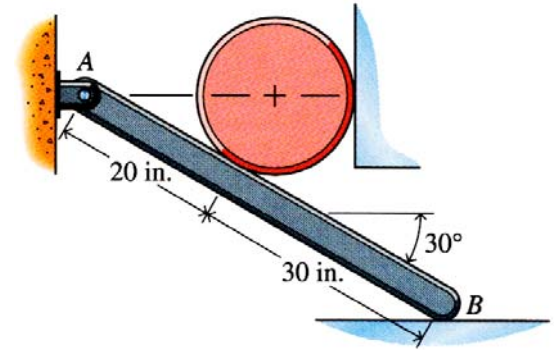


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Exam 2 – Rigid Bodies

Name:
Section: J

1. A 100 lb cylinder is supported by a 20 lb bar. If all surfaces are smooth, determine the reactions at supports A and B of the bar.

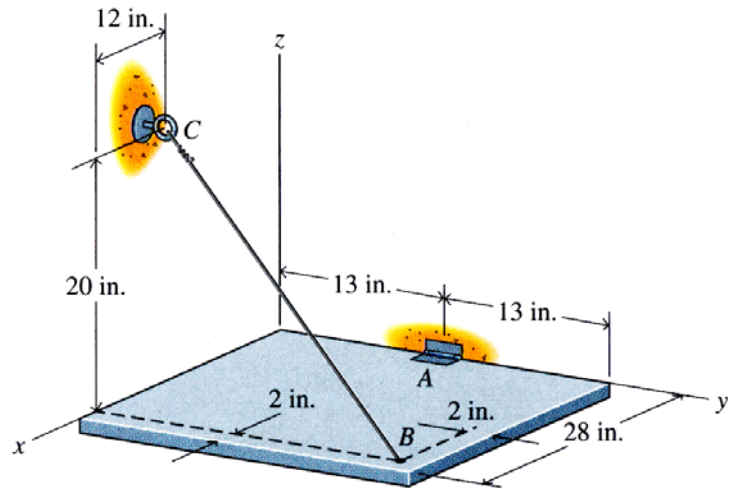


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Exam 2 – Rigid Bodies

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2. A 26"x28" plate weights 200 lb and is supported in the horizontal position by a hinge and a cable. Determine the reactions at the hinge and the tension in the cable.



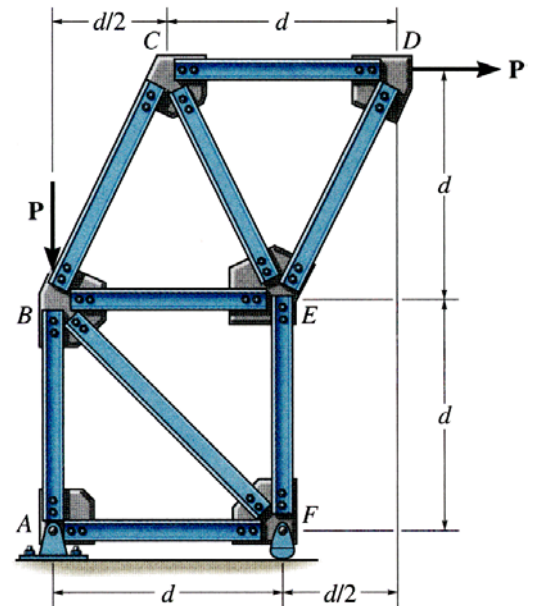
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3. The truss carries the two loads shown. Determine the force in members BC , BE , and CE and state if these members are in tension or compression. Assume that all joints are pinned. Let $P = 500$ lb and $d = 4$ ft.



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4. Determine the reactions at fixed support A and pin B . Also determine the normal force the pin at C exerts on the smooth slot. There is a small pulley at E .

