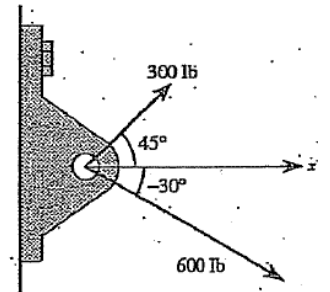


Accel Precalc Practice Worksheet: Force Vectors and Static Equilibrium

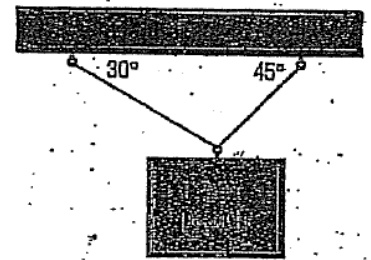
Name \_\_\_\_\_

Unit #8: Extended Trigonometry Lesson 8: Velocity and Force Vectors

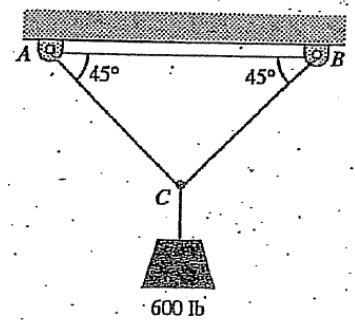
- Forces of 300 lb and 600 lb act on a machine part at angles of  $45^\circ$  and  $-30^\circ$ , respectively, with the x-axis. Find the direction and magnitude of the resultant vector.



- A box of supplies that weighs 1200 lb is suspended by two cables attached to the ceiling as shown below. What is the tension of the two cables?



- A 600 lb weight is suspended by two cables attached to a beam as shown. What is the tension on the two cables?



- A person is standing on a tightrope, as shown below. The total weight of the person and the balancing pole is 200 lb. Find the tension in each end of the tightrope.

