1. Wind is blowing on a $3 m×8 m $billboard whose bottom is $3 m$ off the ground. This wind evenly exerting a constant pressure on of 40 Pa, how much more force is exerted at support B, which is $4 m$ away from support A, because of the wind?

B

A

1. A frictionless wedge of mass M is pushed to the right, by force F, in such a way that a second block of mass, m, does not slide on the sloped frictionless surface. Calculate the required F in terms of M, m and $θ, $the wedge angle.

F

$$θ$$

m

M

1. A spool of rope is pulled (by the rope) as shown. Assume the wheel of the spool does not slide against the floor. Which direction does the wheel move?
2. Two identical long rod of uniform density are completely isolated in space. At time $t\_{0}$, identical forces are applied to each rod, one in the center, one on an edge. Which rod accelerates more?