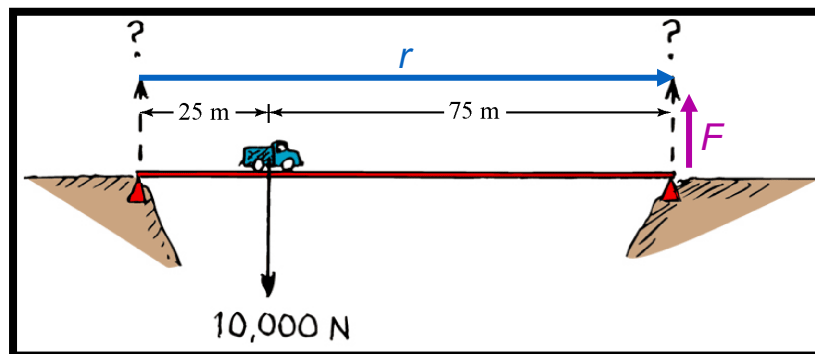

PHYS 1110 Worksheet: Torque

1. What is “leverage?”

2. A 10,000-N truck is located 25 meters from one end of a bridge with a 100-meter span.



A. What torque does the truck's weight exert on the bridge about the post supporting the right end of the span?

B. What upward force (beyond what it needs to support the bridge itself) must the post supporting the left end of the span exert to cancel the torque from the truck's weight?

C. What upward force (beyond what it needs to support the bridge) What additional upward force must the post at the *right* end of the bridge span exert to support its share of the weight of the truck?

3. Find the magnitude and direction of the torque created by force P about axis A .

