Torque: Not Long-and-Skinny Things.

1. The object measures 12.0cm by 30.0cm. Find the torque provided by each force around each pivot.

F2 = 9.0N

F1= 12N

F3= 15N

 A B

2. A. What is the net torque provided by these four forces on this object about the pivot shown?

 0.50m

 140N

 120N

 0.15m

 130N 110N

 B. What is the net force?

3. What is the net torque provided by these four forces on this object about the pivot shown?

 0.50m

 140N

 120N

 0.30m 0.15m

 21o

 110N

 160N

\* The 0.30m is the distance from the pivot to the point of application of the 160N force.

4. The block shown measures 16.0cm by 9.00cm by 2438m (it is very deep!)

240g

21.0o

The block is at rest on the incline and is in static equilibrium.

 A. Find the static friction acting on the block from the incline.

B. Find the normal force acting on the block from the incline.

C. Find the location of the normal force, relative to the bottom left corner of the block.