Torque and Centre of Mass. **Manufactured in a Nut Free Facility!**

3.0kg 5.0kg 2.8kg

0.18m 0.42m 0.63m

1. Find the centre of gravity for the object below. The connecting rod is rigid and massless.

(Give answer relative to the left end of the object)

0.40m 0.90m 1.10m

2. Find the centre of mass for the object below. The connecting rod is rigid and massless.

(Give answer relative to the left end of the object)

0.85kg 0.60kg 1.4kg 1.0kg

0.10m 0.080m 0.50m 0.45m

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3. Find the balance point of the beam shown, with the masses in the positions shown. The beam is 3.00m long, uniform and has a mass of 6.00kg.

24kg

5.0kg

0.40m 0.70m

4. The beam shown below is NON-uniform, has a mass of 850g and is in equilibrium, with the 2.00kg mass placed as shown. Locate the centre of mass of the beam relative to the left end. (Diagram is not to scale)

10.0cm

2.00kg

44.0cm

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