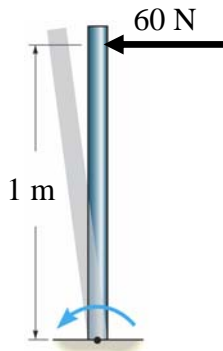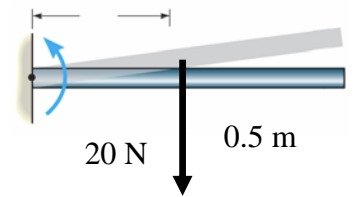1. Calculate the torque on each:
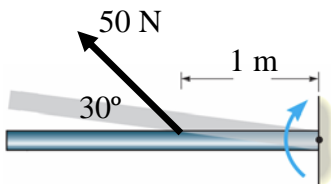
60 N

1 m

[+60 Nm]
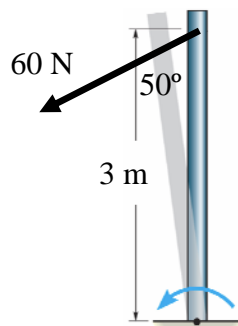
3 m

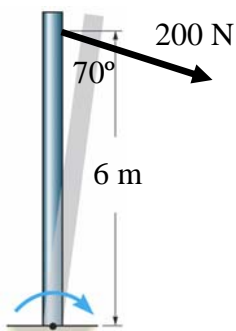100 N

[+300 Nm]

20 N   0.5 m

[+10 Nm]

50 N

1 m

30°

[-25 Nm]

60 N

50°

3 m

[+138 Nm]

40°

4 m

90 N

[-231 Nm]

200 N

70°

6 m

[-1128 Nm]

2 m

45 N   60°

[-78 Nm]

3 m

80 N

[0 Nm]

5 m

90 N
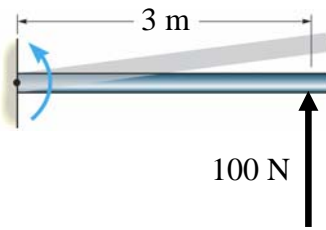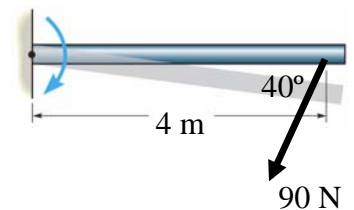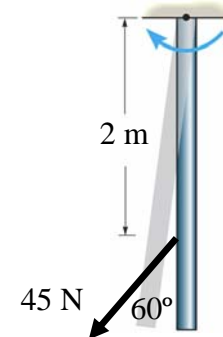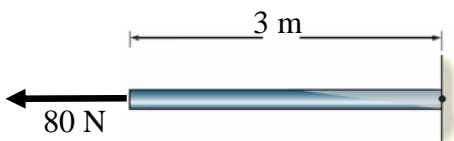
[0 Nm]

Multiple Forces (Torques)

2. What is the total (Net) torque around O?

450 N

30°

O

x

—1.5 m—|—2 m —|—1.5 m—|

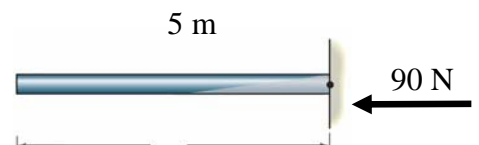200 N
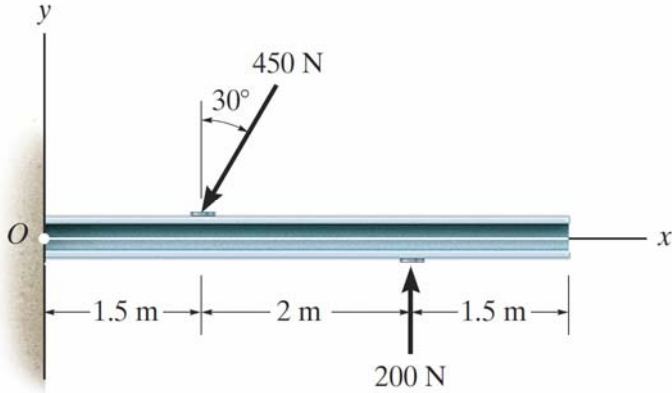
[+115 NM]

3. What must m be so it balances?

12.5 cm

0 cm   25 cm   50 cm   75 cm   100 cm

m = ?   1 kg
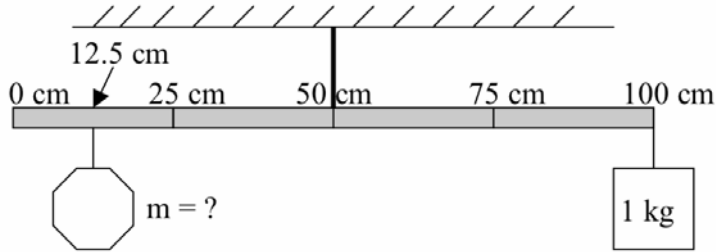
[1.3 kg]

4. What must be the weight on the left so it balances?

0   20   40   60   80   100

? N   40 N
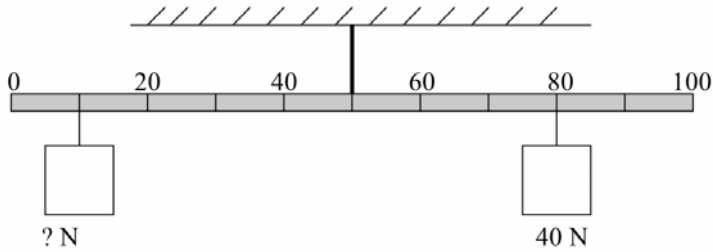
[30 N]

5. The two torques cancel...What must F be?

200 N

3 m

45°

F

5

3

4

B   5 m

A

C
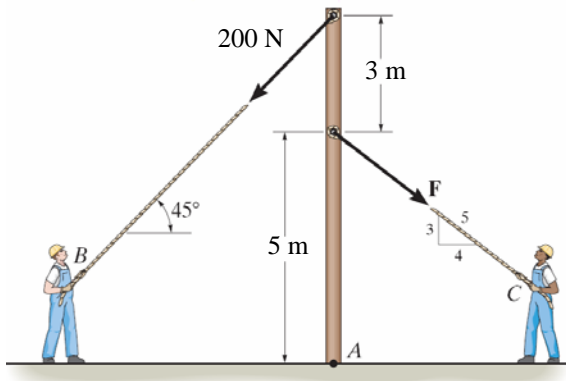
[283 N]

6. What is the net torque around point A?

1 m   0.75 m   0.25 m   1 m

A

5 / 3
4

100 N

12 | 13
5

70 N

50 N

[-295 Nm]

7. What must be the net toque around point O?

500 N

300 N

45° 2.5 m

O

←1 m→   ←2 m→

600 N

[+1250 Nm]