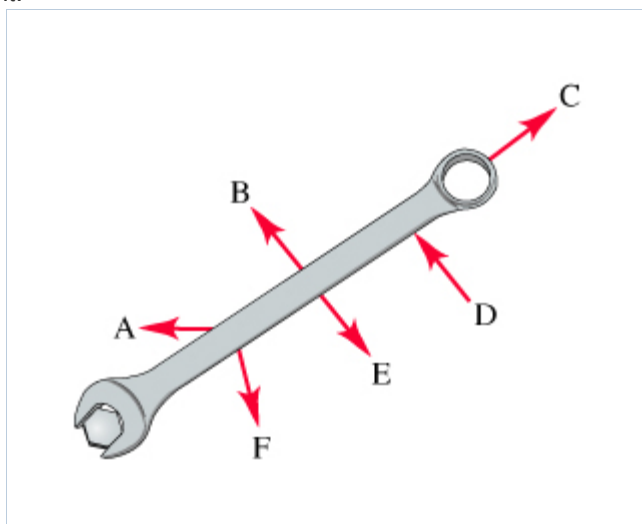


Note: Answer statistics on this page are updated periodically. Statistics were last updated November 23, 2021 at 1:39 am.

Description: Rank the torques induced by various forces acting on a wrench. (ranking task)

The wrench in the figure has six forces of equal magnitude acting on it.



Part A

Grant Full Credit

Rank these forces (A through F) on the basis of the magnitude of the torque they apply to the wrench, measured about an axis centered on the bolt.

Rank from largest to smallest. To rank items as equivalent, overlap them.

ANSWER:

$$\tau_C = 0 \text{ N}\cdot\text{m} \text{ car } \theta = 0^\circ$$

$$\tau_D \text{ LE PLUS GRAND CAR } r \text{ PLUS GRAND}$$

$$\tau_B = \tau_E \text{ (SEULX LE SENS EST DIFFÉRENT)}$$

$$\theta_F > \theta_A \text{ (F PLUS } \perp) \text{ DONC } \tau_F > \tau_A$$

$$\tau_A = \tau_F < \tau_B = \tau_E \text{ DONC } \tau_B = \tau_E > \tau_F$$

Reset Help

largest
smallest

D

B

F

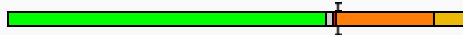
A

C

E

The correct ranking cannot be determined.

Answer Stats:	Students	% Correct	% Unfinished	% Req'd Solution	Wrong/stude
System Average	209993	98.2%	1.3%	0.5%	0.7
This Course (demontigny40085)	(no data)				



Wrong Answers for This Course (demontigny40085)

% Wrong	Answer	Response
(no data)		

Note: Answer statistics on this page are updated periodically. Statistics were last updated November 23, 2021 at 1:39 am.

Description: A plank projects beyond the edge of a table, and a weight is placed on its supported end. How far can it project and still allow the experimenter to stand on the unsupported end without falling?

First, [launch the video](#) below. You will be asked to use your knowledge of physics to predict the outcome of an experiment. Then, close the video window and answer the question at right. You can watch the video again at any point.



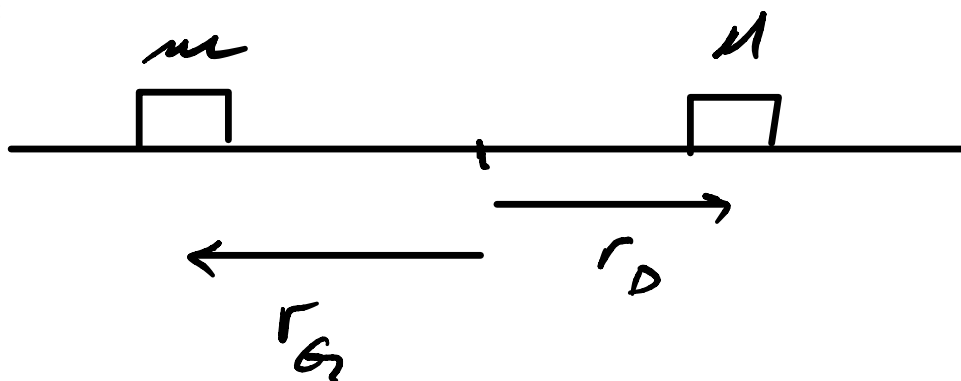
Part A

Grant Full Credit

In the video, the torque due to the mass of the plank is used in the calculations. For this question, ignore the mass of the board. Rank, from largest to smallest, the mass m needed to keep the board from tipping over.

To rank items as equivalent, overlap them.

ANSWER:



$$m r_G = M r_D \quad \longrightarrow \quad m = \frac{M r_D}{r_G}$$

RÉSULTATS

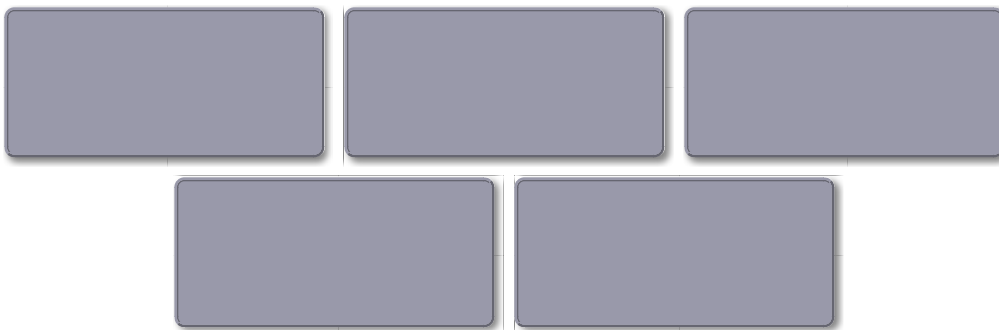
$$m_A = 100 \text{ kg} = m_B$$

$$m_C = 50 \text{ kg}$$

$$m_D = 200 \text{ kg}$$

$$m_E = 33 \text{ kg}$$

Reset Help



Largest Smallest

D m 200 kg

A m 100 kg

C m 100 kg

E m 100 kg

B m 100 kg

The correct ranking cannot be determined.

Answer Stats:	Students	% Correct	% Unfinished	% Req'd Solution	Wrong/stude
System Average	69714	89.4%	6.6%	3.9%	1
This Course (demontigny40085)	(no data)				

Wrong Answers for This Course (demontigny40085)

% Wrong	Answer	Response
(no data)		