Torque

1. Symbol – 

2. Definition:

Torque is a ________________.

Magnitude given by:

Direction by the ________________ ______________

3. Torque depends not only on the force, but also on the __________ of ________________. If you change the axis then you may change both the ________________ and ________________ of the torque.
**Example:** Calculate the net torque on the bar shown for the following axis of rotations:

A. Point C

B. Point P
4. Torque is the ________________ analog of force in that it is

the cause of ________________ ______________ and the

change in ________________ _________________.

5. When a string is wrapped around a pulley, the string will always
always come off tangent to the pulley (i.e. perpendicular to the radius
of the pulley).

For a string on a pulley, the torque is always _____________.

**Example:** A compound pulley is created by wielding a pulley with a
radius of 2 m to a second pulley with a radius of 4 m. Calculate the net
torque applied to the compound pulley about an axis in its center from
the two strings attached as shown below: