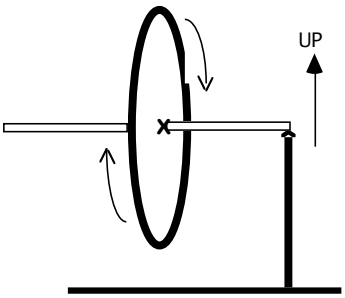
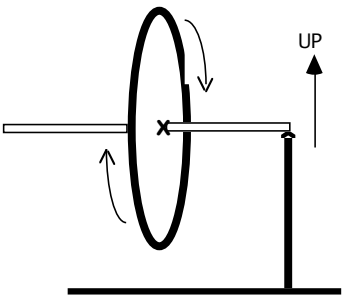
A gyroscope supported at one end is rotating as shown (the edge towards you is moving up, the top edge is moving away from you, the edge away from you is moving down, and the bottom edge is moving towards you). Assume that the support pivot can exert forces on the gyroscope but cannot exert any torques. The **angular velocity** points in what direction?



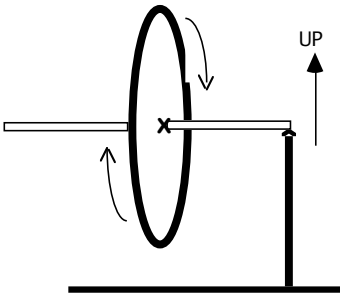
1) Left
2) Right
3) Up
4) Down
5) Into the page
6) Out of the page
7) Other

A gyroscope supported at one end is rotating as shown (the edge towards you is moving up, the top edge is moving away from you, the edge away from you is moving down, and the bottom edge is moving towards you). Assume that the support pivot can exert forces on the gyroscope but cannot exert any torques. Is there a torque around the pivot on the right and, if so, what causes the torque??



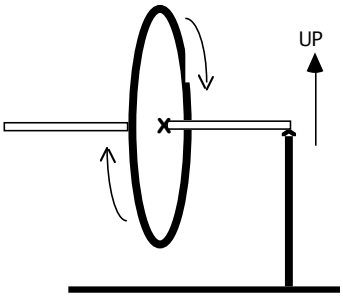
1) No torque.
2) Yes, due to gravity.
3) Yes, due to normal force from the ground.
4) Yes, due to friction.
5) Yes, due to the pivot.
6) Yes, due to angular momentum

A gyroscope supported at one end is rotating as shown (the edge towards you is moving up, the top edge is moving away from you, the edge away from you is moving down, and the bottom edge is moving towards you). Assume that the support pivot can exert forces on the gyroscope but cannot exert any torques. The **torque around the pivot on the right** points in what direction?



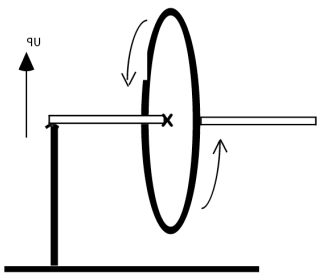
1) Left
2) Right
3) Up
4) Down
5) Into the page
6) Out of the page
7) Other

A gyroscope supported at one end is rotating as shown (the edge towards you is moving up, the top edge is moving away from you, the edge away from you is moving down, and the bottom edge is moving towards you). Assume that the support pivot can exert forces on the gyroscope but cannot exert any torques. Predict the direction in which the unsupported end will rotate:



1) Left
2) Right
3) Up
4) Down
5) Into the page
6) Out of the page
7) Other

A gyroscope now is supported at the ***opposite*** end as shown (the edge towards you is moving up, the top edge is moving away from you, the edge away from you is moving down, and the bottom edge is moving towards you



Predict the direction in which the unsupported end will rotate:

1) Left
2) Right
3) Up
4) Down
5) Into the page
6) Out of the page
7) Other