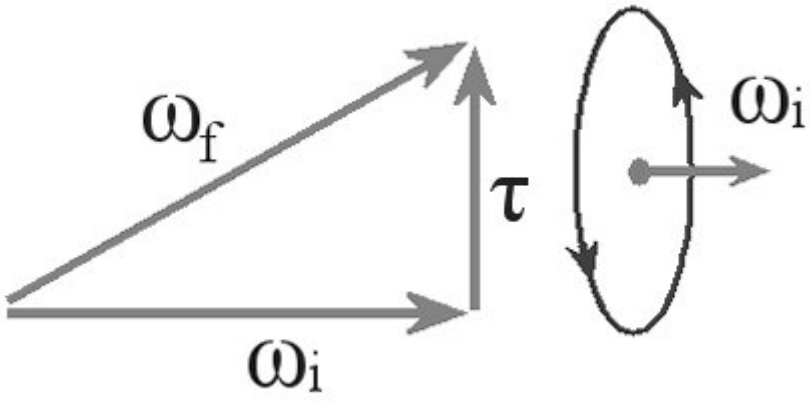
Answer #273

The answer is (b): the bicycle wheel will rotate with the end toward the camera moving down, as seen in an mpeg video by clicking your mouse on the photograph below.



Note that in this case the vector angular momentum originally points toward your right as you view the spinning wheel. When you rotate the wheel counterclockwise as viewed from above, you exert a vector torque in the **upward** direction. Therefore the angular momentum change must be in the upward direction, leading to a net angular momentum that is pointed to the right but slightly in the upward direction, as seen in the photograph and in the drawing at the right.

Question #274 is a follow-up to this question.

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For questions and comments regarding the *Question of the Week* contact Dr. Richard E. Berg by e-mail or using phone number or regular mail address given on the Lecture-Demonstration Home Page.