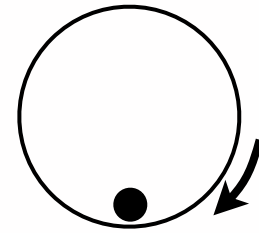


Quiz #8

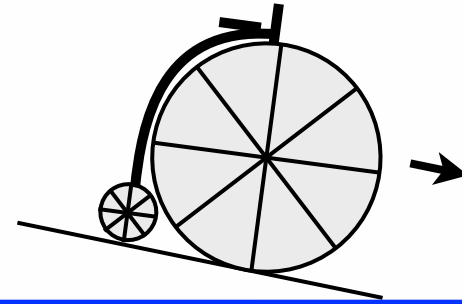
1. This wheel spins clockwise and is spinning up. The linear acceleration a at the point is in which direction?

- A) \leftarrow B) \nwarrow C) \uparrow D) \nearrow E) \rightarrow



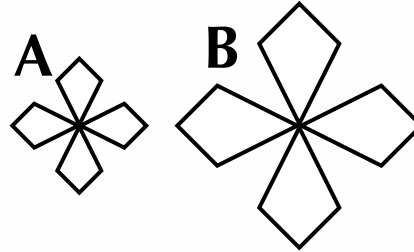
2. A pennyfarthing bicycle is rolling down a hill. Which wheel has the larger angular velocity ω ?

- A) the larger B) the smaller
C) both have the same ω



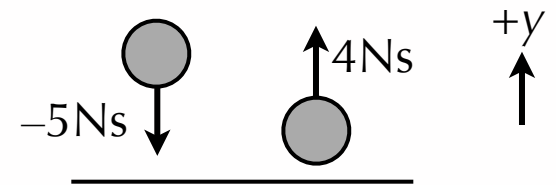
3. Both propellers have the same mass. Which has the larger rotational inertia I ?

- A) A B) B C) both the same



4. A ball bounces off the floor. Its initial momentum is $p_i = -5\text{Ns}$ and its final momentum is $p_f = 4\text{Ns}$. The change in the momentum is

- A) -9Ns B) -1Ns C) 1Ns D) 9Ns



5. A person is falling at 10mph when he lands on something and comes to a stop. The person experiences the larger impulse if he lands on

- A) the sidewalk B) a big cushion C) both feel the same impulse

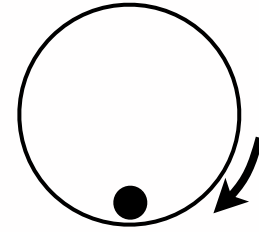
6. A bomb, starting at rest, explodes into a 2kg and a 1kg piece. Which piece is moving more quickly right after the explosion?

- A) 2kg B) 1kg C) both the same



1. This wheel spins clockwise and is spinning up. The linear acceleration a at the point is in which direction?

- A) \leftarrow **B) \nwarrow** C) \uparrow D) \nearrow E) \rightarrow

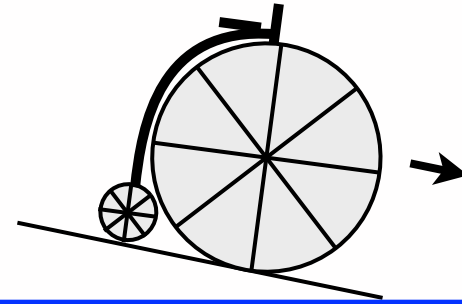


Quiz #8

BBBDCB

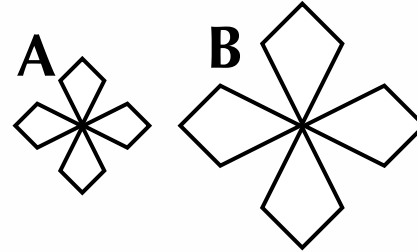
2. A pennyfarthing bicycle is rolling down a hill. Which wheel has the larger angular velocity ω ?

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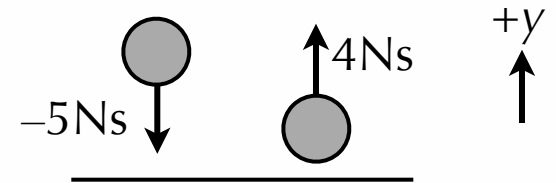
3. Both propellers have the same mass. Which has the larger rotational inertia I ?

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