

1. My answer: B (Exercise B)

I believe it would be more difficult to change the position in Exercise B. Rotational Inertia describes an object's resistance to changes in motion. The larger the rotational inertia, the harder it would be to change the motion or location of the object.

$$I = MR^2$$

Rotational Inertia can be calculated by multiplying the mass of the dumbbell by the radius of the circle it moves along. The mass is the same in each exercise, but the rotational inertia would increase with an increasing radius. Since rotational inertia describes an object's resistance to changes in motion, and it can be proven larger for Exercise B due to its larger radius, it would be more challenging for the weightlifter to perform Exercise B.

**Note that I chose to use rotational inertia as the basis of my argument. There are often multiple physics principles that can be used as evidence to an answer. For this current question, both work and torque would also have been acceptable ways to establish an argument for Exercise B.*