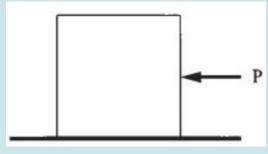
Question 1 A small rotating robotic arm weighs 6.5 N and has a mass radius of gyration of 5.0 cm. The Not yet mass moment of inertia (kg*cm²) is most nearly: answered Marked out of ○ A. 1.00 13.0 v1 (latest) O B. 16.6 ○ C. 162.5 O. 10.6 Question **2** A boat accelerates at a constant rate of 15 ft/sec². The boat travels 150 ft while its speed Not yet changes to 75 ft/sec. The initial velocity (ft/sec) was most nearly: answered Marked out of ○ A. 1.00 58.0 v1 (latest) ○ B. 11.0 ○ C. 33.5 O. 67.0 Question **3** During impact of two objects, which of the following is true? Not yet answered ○ A. Energy is never conserved. Marked out of 1.00 ○ B. v1 (latest) Energy is always conserved. O C. Momentum is always conserved. O D. Momentum is never conserved.



Marked out of 1.00



A 7.5-kg block is sliding along a friction-less surface and is acted on by a constant force ${\bf P}$ of 25 N.



The time (seconds) when the block is moving at 16 m/s is most nearly:

○ A.

3.33

О В.

53.33

O C.

4.50

O. 4.80