

Normal blood flow through an artery occurs in conjunction with a drop in pressure of 8 mm of Hg from the beginning to the end of the artery.













If the artery collects some plaque and its radius drops by 10% (and no other changes occur), what pressure change would be required to maintain the same amount of flow through the artery?

- A. Stay the same
- B. Increase by 10%
- C. Increase by about 25%
- D. Increase by about 50%
- E. Decrease by 10%
- F. Something else

Each row in the following table pairs a force vector with a corresponding displacement, resulting in work W being done. In which of these rows is the $W = 0$?



	\vec{F}	$\Delta\vec{r}$
1.		
2.		
3.		
4.		
5.		

Each row in the following table pairs a force vector with a corresponding displacement resulting in work W being done. In which of these rows is the $W > 0$?



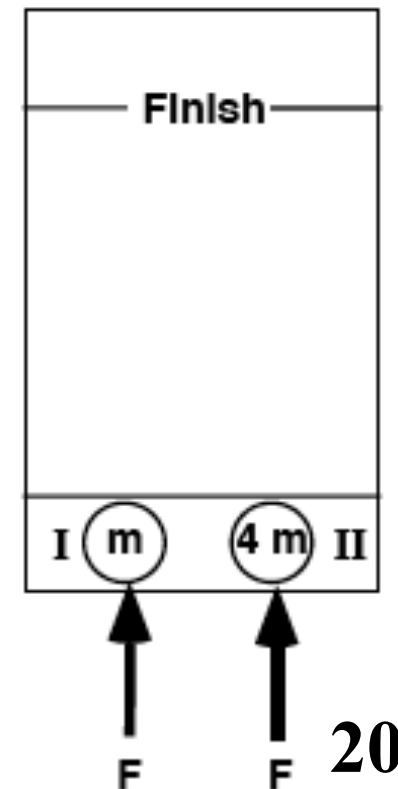
	\vec{F}	$\Delta\vec{r}$
1.	\rightarrow	\leftarrow
2.	\leftarrow	\leftarrow
3.	\uparrow	\rightarrow
4.	\swarrow	\rightarrow
5.	\downarrow	\swarrow



The diagram depicts two pucks on a frictionless table. Puck II is four times as massive as puck I. Starting from rest, the pucks are pushed across the table by two equal forces.

Which puck will have the greater momentum upon reaching the finish line?

- A. Puck I
- B. Puck II
- C. Both will have the same.
- D. There is not enough information to decide.

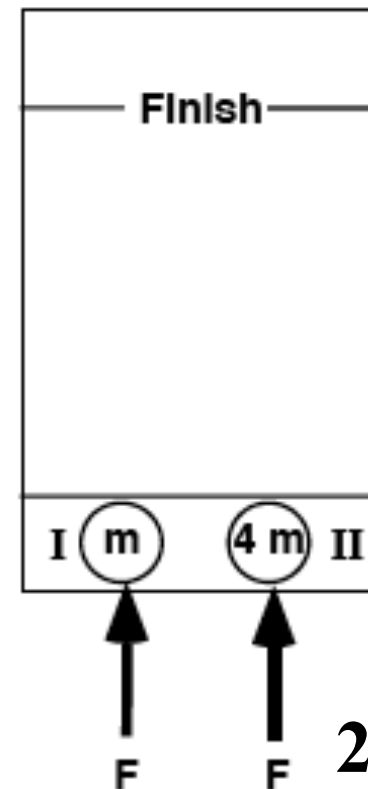


The diagram depicts two pucks on a frictionless table. Puck II is four times as massive as puck I. Starting from rest, the pucks are pushed across the table by two equal forces.



Which puck reach the finish line first?

- A. Puck I
- B. Puck II
- C. Both will have the same.
- D. There is not enough information to decide.





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