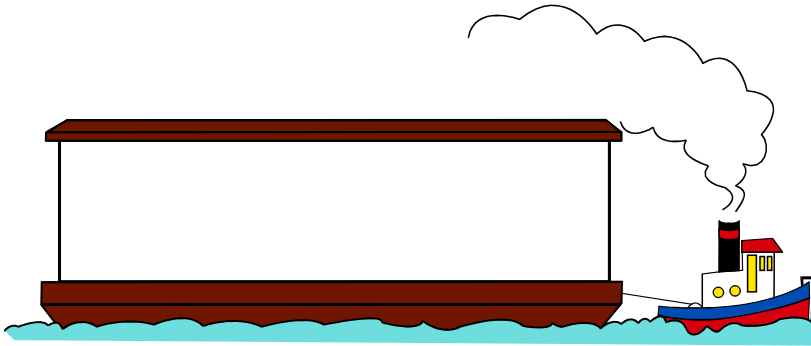


Pre-lab 7



You have a tug boat towing a barge of mass $15,000 \text{ kg}$. The barge is initially at rest. The tug boat can exert a force of $30,000 \text{ N}$ and the water exerts a “drag” force $28,000 \text{ N}$. What is the speed of the tug and barge after they have traveled a distance 100 m ?