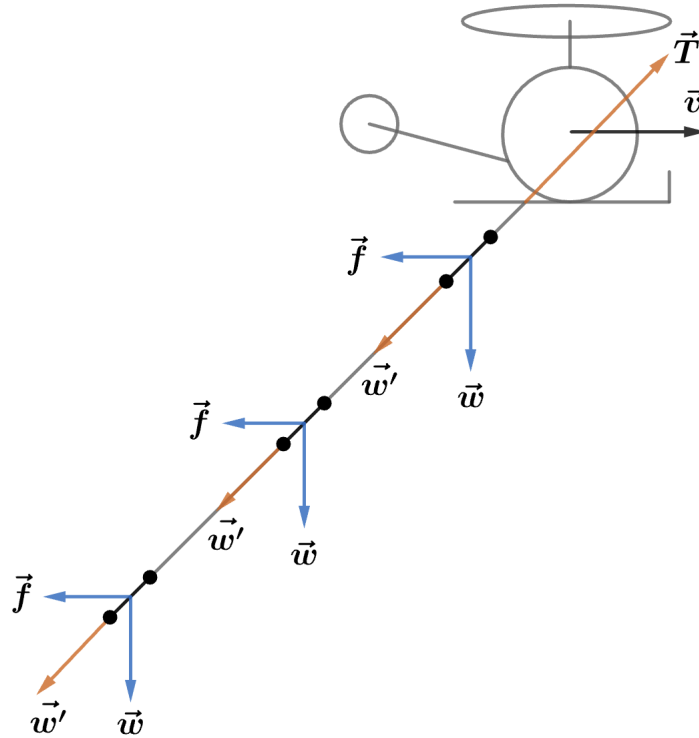


2014 F=ma Exam: Problem 19

Kevin S. Huang



Every small piece of cable feels the same friction force \vec{f} to the left and the same weight \vec{w} downward since they both depend only on the length of the piece. Thus, all the pieces of rope effectively have weight $\vec{w}' = \vec{w} + \vec{f}$ towards the bottom left direction. We know a massive rope hangs downwards in the direction of its weight so the answer is B.