## NEWTON'S $2^{\text {ND }}$

## A Painterly Eye Capturing a High-Flying Muse



Degas, Miss La La, and the Cirque Fernando The aerialist known as Miss La La, as seen in this Degas exhibition at the Morgan Library. Viewers catching their first glimpse of "Miss La La at the Cirque Fernando" will tend to agree with an early Degas biographer who called the painting "one of his most surprising canvases


Miss La La around 1880. She was part of the Troupe Kaira.

INTRODUCTION: In this Degas painting Miss La La is being accelerated ( $8 \mathrm{ft} / \mathrm{s}^{2}$ ) up by a $\operatorname{rope}(T=160 \mathrm{lb}$.$) attached to her teeth (as seen in painting in upper right).$

QUESTIONS: (a) Using Newton's $\mathbf{2}^{\text {nd }}$ law set up the working equation which contains what $\mathbf{F}_{\text {net }}$ is? (b) Find Miss La La's mass(m)in slugs? (c) Find Miss La La's weight in pounds?

HINTS: weight $=\mathrm{mg}, \mathrm{g}=32 \mathrm{ft}, \mathrm{F}_{\text {net }}=\mathrm{ma}$
ANSWERS: (a) $\qquad$ (b) 4 slugs , (c) $\mathbf{1 2 8} \mathrm{lb}$.

This 1879 picture of an aerialist being(( raised to the rafters by a rope clenched between her teeth)) is Degas's only painting of the circus. But after a close look at the painting, made possible by the Morgan Library's "Degas, Miss La La, and the Cirque Fernando," we start to see this canvas as echt Degas. We come to recognize his skeptical eye, his classical perspective on modern entertainment and his attraction (artistic, at least) to women who were both strong and vulnerable. The Cirque Fernando, in Montmartre, was the perfect place to find inspiration for such "unnatural realism," or, as Goncourt called it, "réalité poetique." For modern Parisians like Degas, it was in a category with opera and theater. In contemporary terms, it was more Cirque du Soleil than Ringling Brothers; it had clowns and jugglers and animals, but also acrobats and aerialists like Miss La La, the Prussian-born star of the traveling Troupe Kaira.

