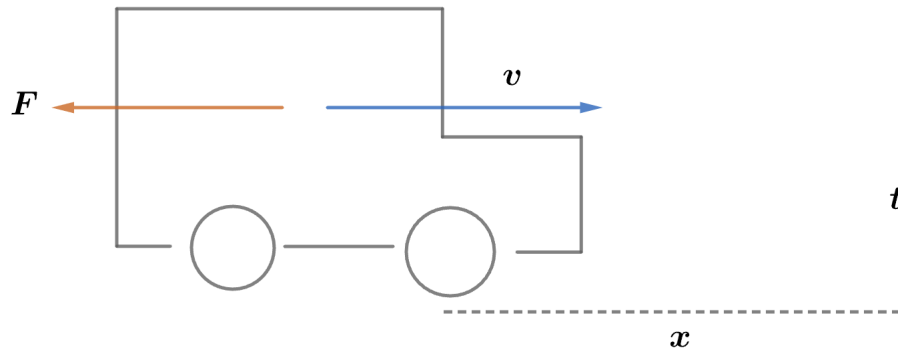# 2013 F=ma Exam: Problem 8

Kevin S. Huang

By the work-energy theorem,

$$W = \Delta K = K_f - K_i$$

We have

$$-Fx = 0 - K_i$$
$$K_i = Fx$$

so the answer is $\boxed{\text{A}}$.