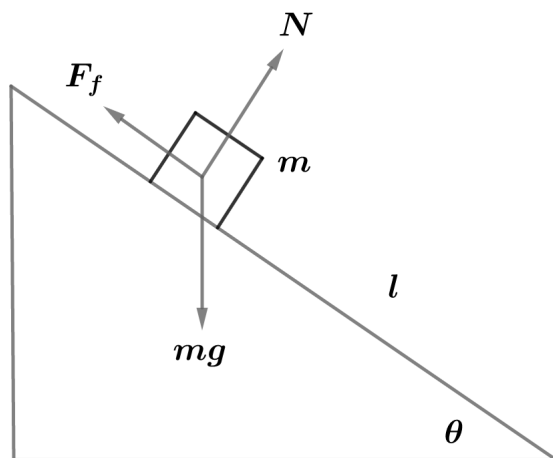


2018B F=ma Exam: Problem 2

Kevin S. Huang



The energy dissipated by friction is given by

$$E_d = F_f d = \mu N l = \mu m g l \cos \theta = (0.1)(10 \text{ kg})(10 \text{ m/s}^2)(10 \text{ m}) \cos 30^\circ = 87 \text{ J}$$