2018B F=ma Exam: Problem 15
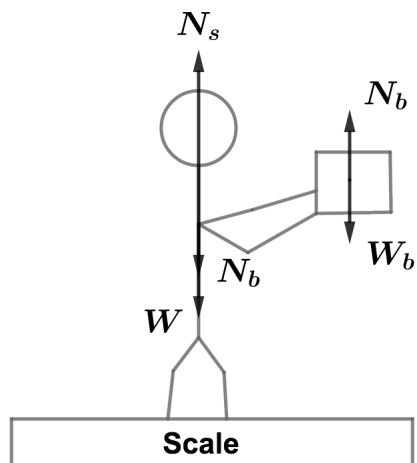
Kevin S. Huang

Since you are at rest, we have

$$N_s = W + N_b$$

For the book,

$$N_b - W_b = ma$$

The scale reads N_s:

$$N_s = W + W_b + ma = 700\,\text{N} + ma$$

Thus, N_s will increase when you accelerate the book to move it upward and N_s will decrease when you decelerate the book to rest. Hence, the answer is $\boxed{\text{E}}$.