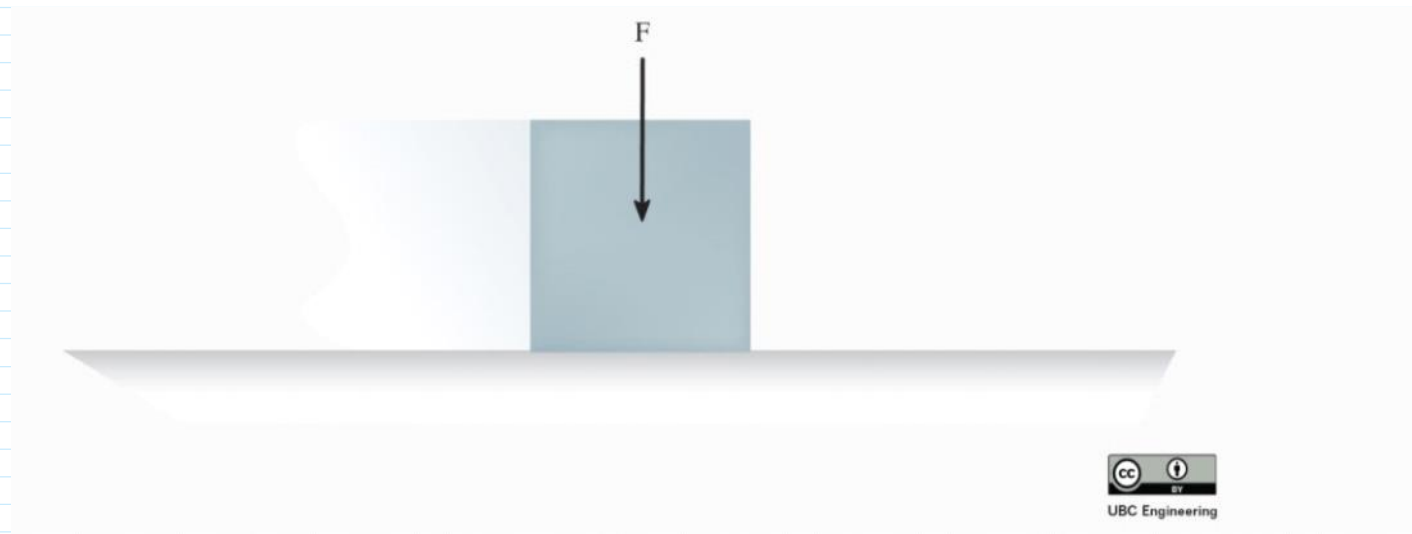# 20-P-MOM-PT-002

September 10, 2020   5:23 PM

Determine the impulse of the force F= 5t N for t=5 s.

$$I = \int F \, dt$$

$$= \int_0^5 5t \, dt$$

$$= \frac{5}{2} t^2 \Big]_0^5$$

$$= \frac{125}{2} \text{ N·s} = 62.5 \text{ N·s}$$

The impulse is 62.5 N·s