

A 1 kg box is being dragged by a 7 N force across a surface where the coefficient of kinetic is 0.3 . What is the box's acceleration?

$$-\frac{\mu_s m g + f^{app}}{m} = a_x$$

$$-\frac{0.3 \cdot 1 \cdot 9.8 + 7}{1} = 4.06 \frac{m}{s^2} = a_x$$