85. We note that in one second, the block slides $d = 1.34$ m up the incline, which means its height increase is $h = d \sin\theta$ where

$$\theta = \tan^{-1}\left(\frac{30}{40}\right) = 37^\circ \ .$$

We also note that the force of kinetic friction in this inclined plane problem is $f_k = \mu_k mg\cos\theta$ where $\mu_k = 0.40$ and $m = 1400$ kg. Thus, using Eq. 8-31 and Eq. 8-29, we find

$$W = mgh + f_k d = mgd\left(\sin\theta + \mu_k \cos\theta\right)$$

or $W = 1.69 \times 10^4$ J for this one-second interval. Thus, the power associated with this is

$$P = \frac{1.69 \times 10^4 \,\mathrm{J}}{1\,\mathrm{s}} = 1.69 \times 10^4 \,\mathrm{W} \ .$$