$$U \cdot I \cdot \eta = F_{wheel} \cdot V_{A/B}$$
$$T_{wheel} = 8.55 \cdot 70\% \cdot I \cdot 10^{-3} \cdot n \qquad \text{(n is the gear ratio)}$$
$$T_{wheel} = F_{wheel} \cdot R_{wheel}$$
$$S = \tfrac{1}{2}\, a \cdot t^2 = \tfrac{1}{2}\, V_{A/B} \cdot t_{A/B} \qquad \text{(S = 6 m, at point A/B)}$$
$$F \cdot t = m \cdot \Delta V \rightarrow (F_{wheel} - F_{rolling}) \cdot t_{A/B} = m \cdot V_{A/B}$$

$eq1 := 7 \cdot 0.7 = Fwheel \cdot Vab$

$$4.9 = Fwheel\, Vab$$

$eq2 := Twheel = 5.985 \cdot 0.001 \cdot n \cdot 0.93$

$$Twheel = 0.00556605\, n$$

$eq5 := Twheel = Fwheel \cdot 0.04$

$$Twheel = 0.04\, Fwheel$$

$eq3 := 6 = \frac{1}{2} \cdot Vab \cdot t$

$$6 = \frac{1}{2}\, Vab\, t$$

$eq4 := (Fwheel - 0.1104) \cdot t = 0.75 \cdot Vab$

$$(Fwheel - 0.1104)\, t = 0.75\, Vab$$

$simplify(solve(\{eq1, eq2, eq3, eq4, eq5\}, [Vab, n, t, Fwheel, Twheel]))$

$$[[Vab = 4.142427119, n = 8.500688297, t = 2.896852414, Fwheel = 1.182881402, Twheel = 0.04731525609], [Vab = -2.071213560 - 3.825725660\, I, n = -3.853653497 + 7.118059363\, I, t = -1.313242534 + 2.425682101\, I, Fwheel = -0.5362407012 + 0.9904868579\, I, Twheel = -0.02144962805 + 0.03961947432\, I], [Vab = -2.071213560 + 3.825725660\, I, n = -3.853653497 - 7.118059363\, I, t = -1.313242534 - 2.425682101\, I, Fwheel = -0.5362407012 - 0.9904868579\, I, Twheel = -0.02144962805 - 0.03961947432\, I]]$$

So $Vab = 4.142427119$, $n = 8.500688297$, $t = 2.896852414$, $Fwheel = 1.182881402$, $Twheel = 0.04731525609$