7 A toy boat of mass 1.5 kg is pushed across a pond, starting from rest, for 2.5 seconds. During this time, the boat has an acceleration of $2\,\mathrm{m\,s^{-2}}$. Subsequently, when the only horizontal force acting on the boat is a constant resistance to motion, the boat travels 10 m before coming to rest. Calculate the magnitude of the resistance to motion. **[6]**