Chris is swimming in a lake, 50 m from the shore.
Her family are 100 m along the shore.


She'd like to get back to her family as quickly as possible.
If she can swim at $3 \mathrm{~m} / \mathrm{sec}$ and run at $7 \mathrm{~m} / \mathrm{sec}$, how far along the shore should she land in order to get back as quickly as possible?

