My brother and I walk the same route to school every day. My brother takes 40 minutes to get to school and I take 30 minutes. Today, my brother left 8 minutes before I did. How long will it take me to catch up with him?

(Don’t forget the units)

My time to go to school=

My brothers time to go to school=

How long it takes me to catch my brother=

Formulas --- \( D = rt \) or \( r = \frac{D}{t} \)

My rate to go to school=

My brothers rate to go to school=