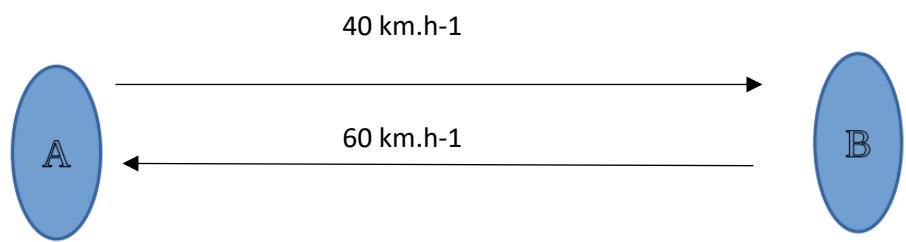


## Croquis



$$DP_{AB} = v_{moyS\ AB} \times \Delta t_1$$

$$DP_{BA} = v_{moyS\ BA} \times \Delta t_2$$

$$\Delta t = \Delta t_1 + \Delta t_2$$

$$DP_{AB} = DP_{BA}$$

$$DP_{ABBA} = DP_{AB} + DP_{BA} = v_{moyS\ ABBA} \times \Delta t$$

$$v_{moyS\ ABBA} = \frac{DP_{ABBA}}{\Delta t} = \frac{2 \cdot DP_{AB}}{\Delta t_1 + \Delta t_2} = \frac{2 \cdot DP_{AB}}{\frac{DP_{AB}}{v_{moyS\ AB}} + \frac{DP_{BA}}{v_{moyS\ BA}}} = \frac{2}{\frac{1}{v_{moyS\ AB}} + \frac{1}{v_{moyS\ BA}}}$$

$$= \frac{2}{\frac{1}{40} + \frac{1}{60}} = 48 \text{ km} \cdot \text{h}^{-1}$$