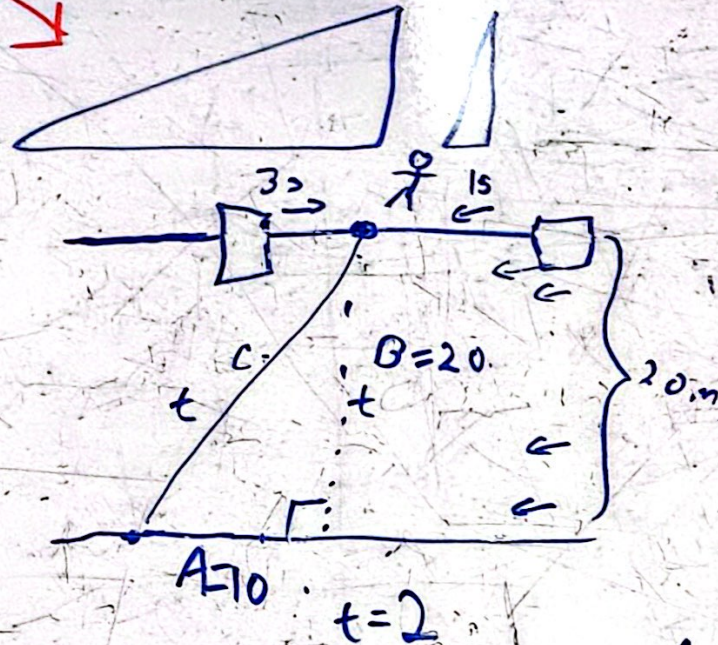


$$V = \frac{d}{t} \quad \vec{V}_{\frac{a}{c}} = \vec{V}_{\frac{a}{b}} + \vec{V}_{\frac{b}{c}}$$



$$10 + V_y = \frac{d}{t}$$

$$10 - V_y = \frac{d}{3}$$

$$10 + V_y = 30 - 3V_y$$

$$4V_y = 20$$

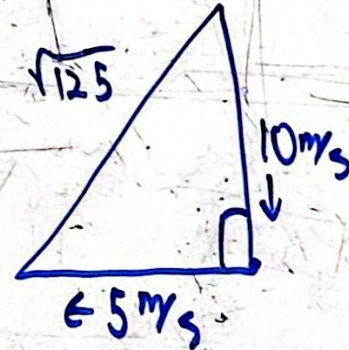
$$V_y = 5 \text{ m/s}$$

River Velocity = 5 m/s

Boat Velocity = 10 m/s

$V_{B/R}$ = velocity of boat w/ respect to the river

$$V_{B/R} = 10 \text{ m/s}$$



Facts

- 20 m wide
- River / Boat constant
- 2 docks
- Stopwatch
- 2 seconds across

Approx. / Assump

- dist: 20 m
- diag $v = 10 \text{ m/s}$
- time across = 2 sec
- 1 sec from doc to doc w/ motor
- 1 sec River
- 3 sec take doc to doc w/ motor

Looking

- distance between docks
- speed of river and boat
- time dock to dock with motor on up and down

Representation

