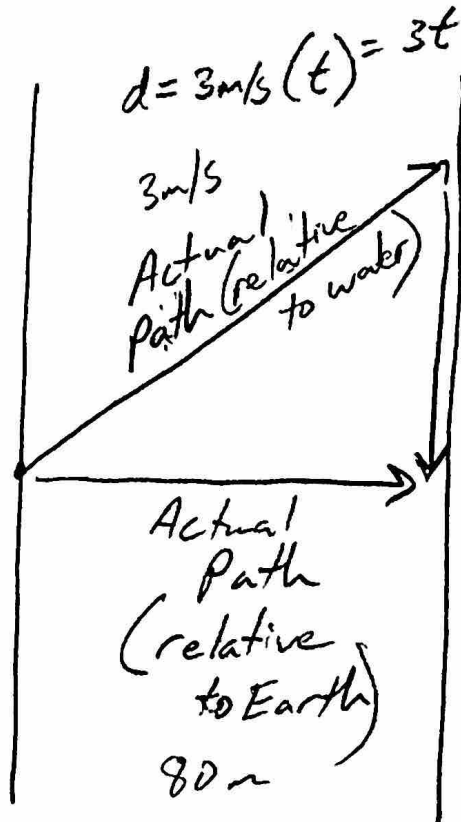


Jane



$$d = rt$$

$$\text{Current } d = 2 \text{ m/s } (t) = 2t$$

~~$(2t)^2 + 80^2 = (3t)^2$~~

$$(2t)^2 + 80^2 = (3t)^2$$

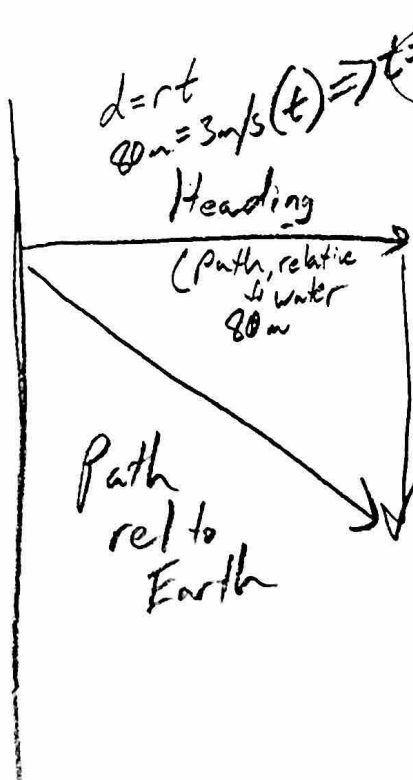
$$4t^2 + 6400 = 9t^2$$

$$6400 = 5t^2$$

$$t^2 = 1280$$

$$t = 35.8 \text{ s}$$

Bob



$$\text{Current } d = rt$$
$$(2 \text{ m/s}) = 2 \text{ m/s } (26.7 \text{ s}) = 53.3 \text{ m}$$

$$d = rt$$
$$53.3 \text{ m} = 4 \text{ m/s } (t) \Rightarrow t = 13.3 \text{ s}$$

$$26.7 \text{ s} + 13.3 \text{ s} = 40 \text{ s}$$