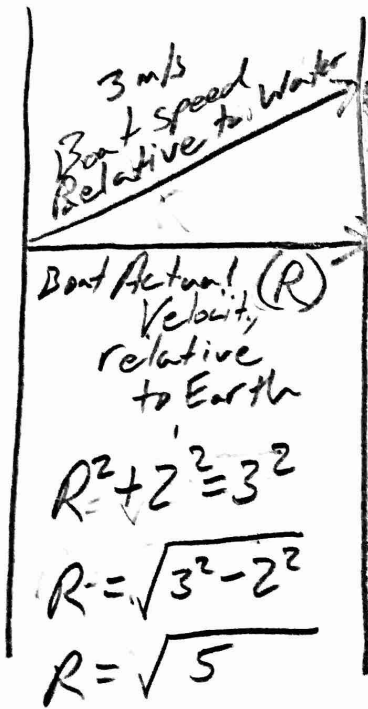


Jane



$$R^2 + 2^2 = 3^2$$

$$R = \sqrt{3^2 - 2^2}$$

$$R = \sqrt{5}$$

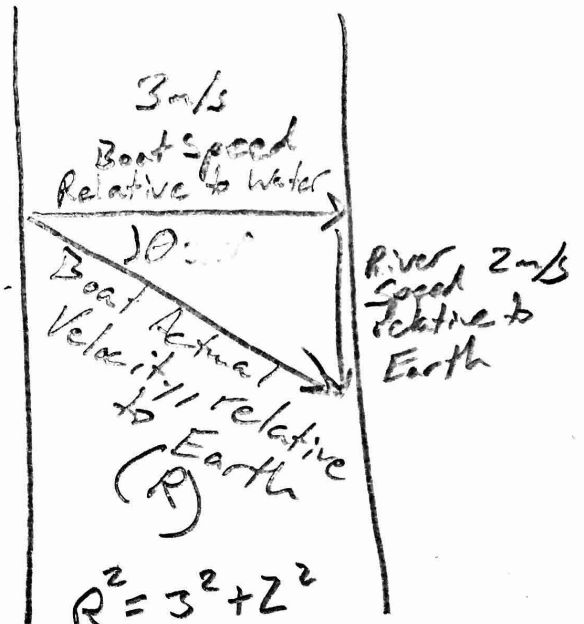
$$V = 2.24 \text{ m/s}$$

$$d = vt$$

$$80 \text{ m} = 2.24 \text{ m/s} (t)$$

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

Bob



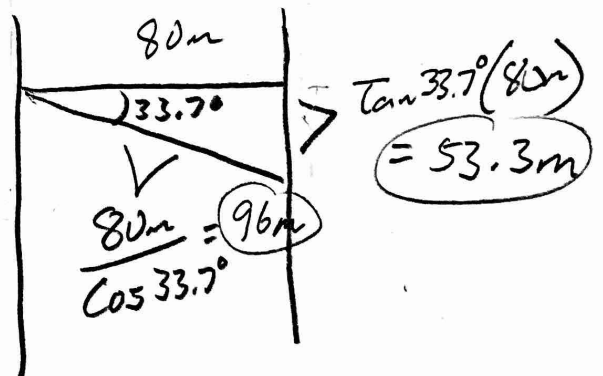
$$R^2 = 3^2 + 2^2$$

$$R = \sqrt{9 + 4}$$

$$R = 3.61$$

$$V = 3.61 \text{ m/s}$$

$$\theta = \tan^{-1}\left(\frac{2}{3}\right) = 33.7^\circ$$



$$\text{Crossing time} = \frac{96 \text{ m}}{3.61 \text{ m/s}} = 26.6 \text{ s}$$

$$\text{Up river walk} = \frac{53.3 \text{ m}}{4 \text{ m/s}} = 13.3 \text{ s}$$

$$\text{Total time} = 26.6 + 13.3 = 39.9 \text{ s}$$