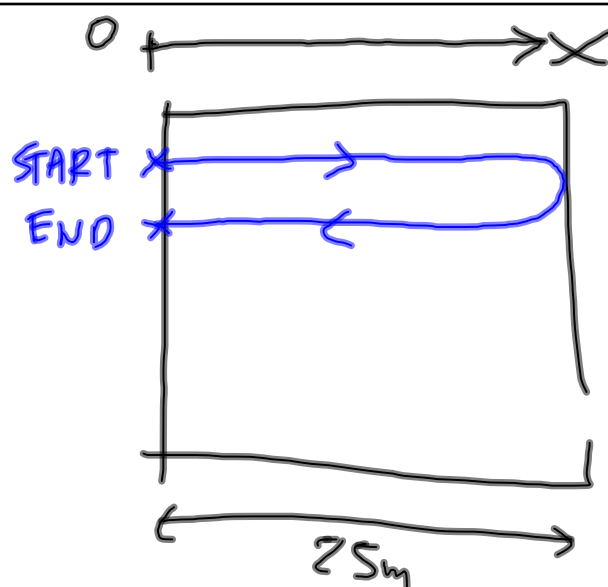


A swimmer does 1 lap in a 25 m long pool in 50 s. Sketch the following:

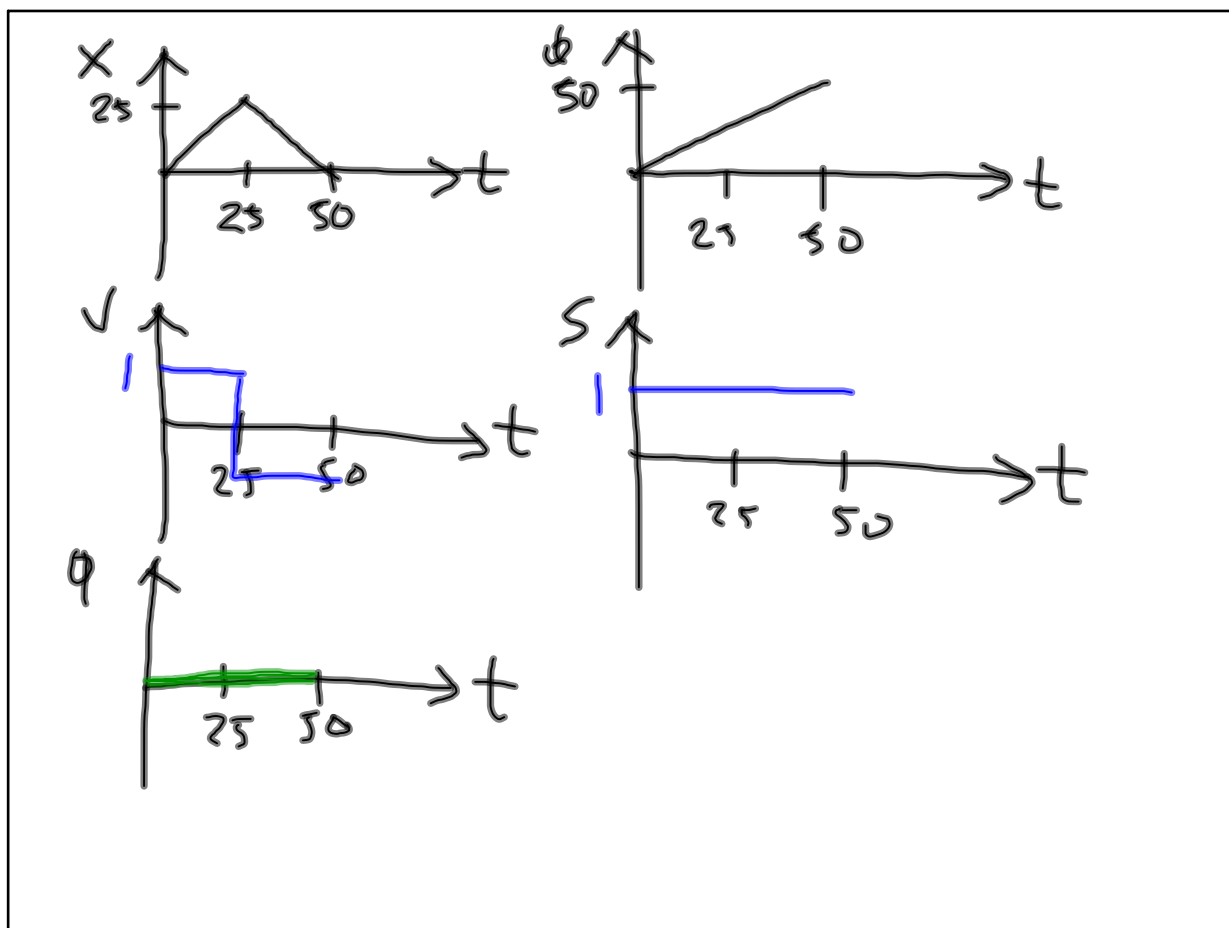
- a) x-t
- b) v-t
- c) a-t
- d) d-t
- e) s-t
- f) Find v_{avg}
- g) Find s_{avg}

The swimmer does not speed up or slow down; all velocities are instantaneous.

Sep 19-7:34 AM



Sep 19-8:07 AM



Sep 19-8:09 AM

$$f) \quad \bar{v} = \frac{\Delta x}{\Delta t}$$

$$\bar{v} = \frac{0}{50}$$

$$\boxed{\bar{v} = 0}$$

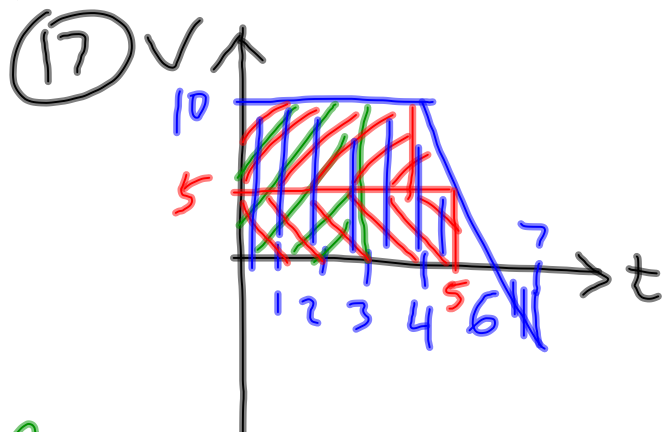
$$g) \quad \bar{s} = \frac{\text{tot. } d}{\text{tot. } t}$$

$$\bar{s} = \frac{50}{50}$$

$$\boxed{\bar{s} = 1 \frac{\text{m}}{\text{s}}}$$

Sep 19-8:12 AM

HANDOUT #2



$$A_{1-3} = \Delta X_{1-3}$$

$$\Delta X_{1-3} = 30 \text{ m}$$

$$\text{RED AREA} = \Delta X_{1-5}$$

$$\text{BLUE AREA} = \Delta X_{1-7}$$

$$X_0 = 20 \text{ m}$$

$$X_F = ?$$

$$\Delta X = X_F - X_0$$

$$30 = X_F - 20$$

$$X_F = 50 \text{ m}$$

Sep 19-8:16 AM