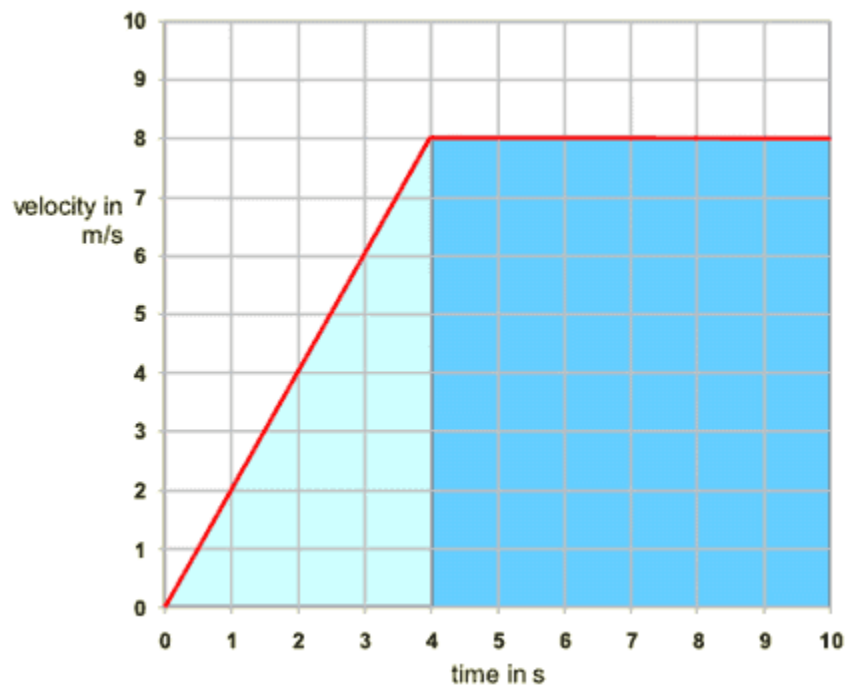


**P2.2e Use the area under a velocity-time graph to calculate the distance traveled and the slope to calculate the acceleration**



How fast was the object moving at time = 0 seconds?

**0m/s**

How far did the object move in the first four seconds?

**the area of the light blue triangle...  $1/2 \text{base} \times \text{height}$**

How far did the object move from t=4 seconds until t=10 seconds?

**the area of the dark blue rectangle...  $L \times W$**

What was the object's acceleration during the first four seconds?

$$a = (V_f - V_o) / t$$

What was the object's acceleration the last six seconds shown on this graph?

**0**

On this graph, sketch the motion of an object that has an acceleration of +2 for five seconds, and then -2 for five seconds.

