Task:

From t = 0 to t = 4.70 min, a man stands still, and from t = 4.70 min (282 s) to t = 9.40 min, he walks briskly in a straight line at a constant speed of 2.95 m/s. What is his average speed in the time interval 2.00 min to 6.70 min?

Solution:

$$v_{avg} = \frac{s}{t}$$

The average speed in the time interval 2.00 min (120 s) to 6.70 min (402 s):

$$v_{avg} = \frac{s(402\ s) - s(120\ s)}{402\ s - 120\ s}$$

$$s(402\ s) = v_{const} \cdot (402\ s\ -\ 282\ s) = 2.95\frac{m}{s} \cdot 120\ s = 354\ m$$

$$s(120\ s) = 0\ m$$

$$v_{avg} = \frac{s(402\ s) - s(120\ s)}{402\ s - 120\ s} = \frac{354\ m}{282\ s} = 1.255\frac{m}{s}$$

Answer:

$$v_{avg} = 1.255\frac{m}{s}$$