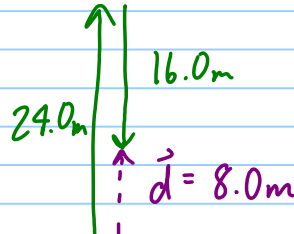1) During a game a soccer player runs 24.0 m North and then 16.0 m South in 12 s. Find his:

a. Average speed.

b. Average velocity

2) You are traveling on a highway at 90.0 km/h when you sneeze. During your sneeze your eyes are closed for 0.50 s. How far did you travel with your eyes closed?

1.) a. $V = \dfrac{d}{t} = \dfrac{(24+16)\,m}{12s} = \boxed{3.3\,m/s}$ ✓

b.

16.0m

24.0m

$\vec{d} = 8.0m$

$\vec{V} = \dfrac{\vec{d}}{t} = \dfrac{8.0m}{12\,s} = \boxed{0.75\,m/s\ (North)}$ ✓

2.) $V = 90.0\,Km/h \div 3.6 = 25.0\,m/s$ ✓

$d = ?$

$t = 0.50s$

$V = \dfrac{d}{t} \cdot t$ ✓

$d = V \cdot t$

$= (25.0\,m/s)(0.50s)$

$= \boxed{13\,m}$ ✓