

6. Using Eq. 4-3 and Eq. 4-8, we have

$$\begin{aligned}\vec{v}_{\text{avg}} &= \frac{(-2.0\hat{i} + 8.0\hat{j} - 2.0\hat{k}) - (5.0\hat{i} - 6.0\hat{j} + 2.0\hat{k})}{10} \\ &= -0.70\hat{i} + 1.40\hat{j} - 0.40\hat{k}\end{aligned}$$

in meters-per-second.