

4. Since  $\vec{v} = \text{constant}$ , we have  $\vec{a} = 0$ , which implies

$$\vec{F}_{\text{net}} = \vec{F}_1 + \vec{F}_2 = m\vec{a} = 0 .$$

Thus, the other force must be

$$\vec{F}_2 = -\vec{F}_1 = -2\hat{i} + 6\hat{j} \text{ N} .$$