

11.3. Solve: (a) $\vec{A} \cdot \vec{B} = A_x B_x + A_y B_y = (3)(-2) + (-4)(6) = -30.$

(b) $\vec{A} \cdot \vec{B} = A_x B_x + A_y B_y = (2)(6) + (3)(-4) = 0.$