

$$V^xe_x+V^ye_y+V^ze_z$$

$$B^{xy}e_x\wedge e_y+B^{xz}e_x\wedge e_z+B^{yz}e_y\wedge e_z$$

$$v\cdot B=(-B^{xy}V^y-B^{xz}V^z)e_x+(B^{xy}V^x-B^{yz}V^z)e_y+(B^{xz}V^x+B^{yz}V^y)e_z$$

$$0$$