

**Solution** (#884) We have

$$(1, 2, 3) \wedge (3, 2, 1) = (-4, 8, -4). \quad (1, k, 1) \wedge (1, 0, 1) = k(1, 0, -1). \quad (k, 1, k) \wedge (1, 0, 1) = (1, 0, -1).$$