

## Quiz 2

1)

$$a) \langle 1, 1, 1 \rangle \cdot \langle 3, -2, -1 \rangle = 3 - 2 - 1 = 0 \leftarrow \text{perpendicular}$$

$$b) \langle 4, 3 \rangle \cdot \langle 2, -4 \rangle = 8 - 12 = -4$$

↑

not perpendicular

product is negative  $\rightarrow$  angle is obtuse

$$2) \begin{bmatrix} i & j & k \\ 0 & 1 & -1 \\ 1 & -1 & 0 \end{bmatrix} = i - j - k$$

## Quiz 3