

Q 2 solution correction.

$$J(\theta) = \begin{bmatrix} -0.4 \sin 35^\circ - 0.3 \sin(35^\circ + 75^\circ) & -0.3 \sin(35^\circ + 75^\circ) \\ 0.4 \cos 35^\circ + 0.3 \cos(35^\circ + 75^\circ) & 0.3 \cos(35^\circ + 75^\circ) \end{bmatrix}$$

$$= \begin{bmatrix} -0.511 & -0.282 \\ 0.225 & -0.103 \end{bmatrix}$$

$$\begin{bmatrix} v_x \\ v_y \end{bmatrix} = J(\theta) \begin{bmatrix} 1.745 \\ -0.873 \end{bmatrix} = \begin{bmatrix} -0.646 \\ 0.483 \end{bmatrix}$$