

4 The position vector of P is $\mathbf{p} = \begin{pmatrix} 4 \\ 3 \end{pmatrix}$ and the position vector of Q is $\mathbf{q} = \begin{pmatrix} 28 \\ 10 \end{pmatrix}$.

(a) Determine the magnitude of \overrightarrow{PQ} . **[2]**

(b) Determine the angle between \overrightarrow{PQ} and the positive x -direction. **[2]**