3 The point A has position vector $\overrightarrow{OA} = \begin{pmatrix} 7 \\ 1 \end{pmatrix}$ and the point B has position vector $\overrightarrow{OB} = \begin{pmatrix} 2 \\ 6 \end{pmatrix}$.

(a) Find the magnitude and direction of $\overrightarrow{OA}$. **[3]**

(b) Show that the triangle OAB is isosceles. **[2]**