

7 The point A has position vector $\begin{pmatrix} -2 \\ 1 \end{pmatrix}$. The vector $\overrightarrow{AB}$ is $\begin{pmatrix} 8 \\ 6 \end{pmatrix}$.

(a) On the axes in your Printed Answer Book, draw the position of the points A and B. **[2]**

(b) Calculate the distance AB. **[1]**

(c) Show that the midpoint of AB lies on the line $y = 2x$. **[2]**

7(a)

