

11D Position Vectors

1. The points A and B in the diagram have coordinates (1,5) and (7,4) respectively. Find, in terms of \mathbf{i} and \mathbf{j} :
 - a) The position vector of A
 - b) The position vector of B
 - c) The vector \overrightarrow{AB}

2. $\overrightarrow{OA} = 5i - 2j$ and $\overrightarrow{AB} = 3i + 4j$ Find:

a) The position vector of B

b) The exact value of $|\overrightarrow{OB}|$ in simplified surd form