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| **Vector Proof – Equating Coefficients** | | |
| **(a)** | **(b)** | **(c)** |
| is a quadrilateral, where and . The point is on and such that  and  By finding two ways to express the vector , find the values of and . | is a trapezium, where and . is the midpoint of the line . The point is on and such that  and  Find the values of and and the vector in terms of and . | In the triangle and where is the midpoint of . is the line OB produced and . The point is on the line such that . Given that is a straight line, find the value of and the vector in terms of and . |

and