

Points  $A$  and  $B$  have coordinates  $(5, 2)$  and  $(10, -1)$  respectively.

**(a)** Find the equation of the perpendicular bisector of  $AB$ .

[3]

This image shows a full page of white paper with ten horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and run across the entire width of the page. There is no text or other markings on the paper.

**(b)** Find the equation of the circle with centre  $A$  which passes through  $B$ .

[3]

[illegible]