

Question Number	Answer	Marks
1	gradient of $AB = \frac{9-3}{5-9} = -\frac{3}{2}$ oe gradient of perp = $\frac{2}{3}$ coords of midpoint of AB are $(7, 6)$ Equation of perp bisector: $y - 6 = \frac{2}{3}(x - 7)$ $2x - 3y + 4 = 0$ or multiple	B1 B1ft B1 M1 (must use grad of \perp and coords of midpoint) A1 [5]

Notes

B1 for the (correct) gradient of AB

B1ft for the gradient of the perpendicular, ft ie give for $-\frac{1}{\text{their gradient of } AB}$

B1 for both coordinates of the midpoint of AB

M1 for any complete method for the equation of the perpendicular bisector. Their gradient of the perpendicular and their coordinates of the midpoint must be used.

A1 for $2x - 3y + 4 = 0$ or any integer multiple of this (inc negative multiples). A correct equation in the form $\dots = 0$, even if the y term is shown first.