Due to the error on the paper, **all** candidates will get 4 marks for question 12(a) and all candidates will get 2 marks for 12 (b).

All assessors will need to be instructed to put a SEEN annotation on both and then award full marks in RM.

The only instance where full marks would not be awarded is where a candidate has only put their name on the script and has not attempted any question. This would then need to be a 0.

The MS for the correct question is given below for completeness.

12	**(a)**		$x = 4t^2, \quad y = 8t$ PQ = $4 + 4t^2$ $PR^2 = (4t^2 - 4)^2 + (8t)^2$ $= 16t^4 + 32t^2 + 16$ $= (4 + 4t^2)^2 = PQ^2$ So equidistant	**B1** **M1** **M1** **A1** **[4]**	**2.1** **2.1** **2.1** **2.1**	Use of distance formula Must show some algebraic manipulation Correct expression for PR or PR^2 Conclusion comparing PQ and PR or PQ^2 and PR^2	
12	**(b)**		Substitute $t = \frac{y}{8}$ to obtain $x = 4\left(\frac{y}{8}\right)^2$ $y^2 = 16x$	**M1** **A1** **[2]**	**1.1a** **1.1b**	Rearranged equation must be used Allow any equivalent form including $y = \pm 4\sqrt{x}$	allow use of $t = \frac{\sqrt{x}}{2}$ oe used for M1A0.