

Q	Marking Instructions	AO	Marks	Typical Solution
7	Identifies transformed functions as $(x \pm 3)^2$ and $2x$ or $\frac{1}{2}x$, at least one correct.	3.1a	M1	C_1 has equation $y = (x - 3)^2$ L_1 has equation $y = \frac{1}{2}x$
	Forms correct equation	1.1b	A1	$(x - 3)^2 = \frac{1}{2}x$
	Solves their quadratic equation	1.1a	M1	$x^2 - \frac{13}{2}x + 9 = 0$
	Obtains correct x values	1.1b	A1	$x = 2$ or $4\frac{1}{2}$
	Applies distance formula to their x and y values	1.1a	M1	$y = 1$ or $2\frac{1}{4}$
	Obtains correct distance for their intersection points (non-zero values), any equivalent exact form.	1.1b	A1F	Distance = $\sqrt{\{(4\frac{1}{2} - 2)^2 + (2\frac{1}{4} - 1)^2\}}$ $= \frac{5\sqrt{5}}{4}$
	Total		6	