

Question	Answer	Mark	Mark scheme	Additional guidance
20	$x = 26.3\dots, y = -45.6\dots$ and $x = 1.71\dots, y = 3.57\dots$	M1	for correct substitution for $y^2$ or $x^2$ , eg $(7 - 2x)^2 = 3x^2 + 4$ <b>OR</b> for correct rearrangement and expansion of $(7 - 2x)^2$ to obtain 4 terms with all correct without considering signs or for 3 terms out of 4 correct with correct signs <b>and</b> substitution eg $(7 - 2x)^2 = 49 - 14x - 14x + 4x^2$ <b>and</b> $49 - 14x - 14x + 4x^2 = 3x^2 + 4$	NB $49 - 28x$ or $-28x + 4x^2$ can be considered 3 terms out of 4 correct with correct signs
		M1	for method to write a correct simplified equation eg $x^2 - 28x + 45 (=0)$	The quadratic does not have to equal 0, ie accept $x^2 - 28x = -45$
		M1	for a method to solve a correct quadratic eg $\frac{28 \pm \sqrt{(-28)^2 - 4 \times 1 \times 45}}{2 \times 1}$ or $\frac{28 \pm \sqrt{604}}{2}$ or $14 \pm \sqrt{151}$ <b>or</b> $(x - 14)^2 - 14^2 + 45 = 0$ oe	Can be implied by both $x$ values correct or both $y$ values correct
		A1	$x = 26.2$ to $26.3, y = -45.6$ to $-45.5$ <b>and</b> $x = 1.7$ to $1.712, y = 3.5$ to $3.6$	Answers must be correctly paired (Maybe in the body of the working) If answers are given in the range in working and then rounded incorrectly award full marks