

Question	Scheme	Mark	Notes
13	$4x^2 + 45 = 9x^2$ Condone lack of brackets for M1 only $45 = 5x^2$ (oe) $x = 3$ Accept $x = \pm 3$	3	M1 M1 (DEP) A1
14	$\sqrt{(\sqrt{8})^2 + 1^2}$ or 3 (Pythagoras) $\therefore (3) \left(\frac{\sqrt{8}}{\sqrt{(\sqrt{8})^2 + 1^2}} + \frac{1}{\sqrt{(\sqrt{8})^2 + 1^2}} \right)$ $1 + \sqrt{8}$ NB: No working shown scores M0 M0 A0 even if correct answer given.	3	M1 M1 (DEP) A1
15 (a)	3, 6, 9, 12, 15 only	1	B1
(b)	$C = \{6, 12, 18, \dots, 48\}$ First B mark in (b) can be implied by $(A \cap B) \cap C' = \{3, 9, 15\}$ (so $C' = \{3, 9, \dots, 45\}$) $\therefore (A \cap B) \cap C' = \{3, 9, 15\}$ NB: ft on "(a)" $n([A \cap B] \cap C') = 3$ (cao)	3	B1 B1 B1
16 (a)	$\begin{pmatrix} -9 & -25 \\ -4 & 26 \end{pmatrix}$	2	B2 (-1eoo)
(b)	$\begin{pmatrix} -5 & 1 & 12 \\ 0 & -14 & -28 \end{pmatrix}$	2	B2 (-1eoo)