

Question	Answer	Mark	Mark scheme	Additional guidance
16 (a)	Shown	C1	for showing values of $-5$ and $10$ leading to the conclusion	
(b)	Shows re-arrangement	C1	for showing re-arrangement must see $2x^3 = 8 - x$ or $x^3 = \frac{8-x}{2}$ leading to $x = \sqrt[3]{\frac{8-x}{2}}$	Can work backwards No incorrect steps allowed
(c)	1.483	M1	for substitution to find $x_1$ eg $\sqrt[3]{\frac{8-1.5}{2}}$ ( $=1.48(1248034)$ )	Accept an accuracy of 2dp or more rounded or truncated for $x_1$
		M1	for substitution to find $x_2$ eg $\sqrt[3]{\frac{8-"1.48(1248034)"}{2}}$ ( $=1.482(671093)$ )	Accept an accuracy of 3dp or more rounded or truncated for $x_2$
		A1	for awrt 1.483	For reference $x_3 = 1.482563195$ If correct answer is seen and then incorrectly rounded award full marks