18	$\sqrt{4} : \sqrt{9}\ (= 2:3)$ or $\frac{\sqrt{4}}{\sqrt{9}}\left(= \frac{2}{3}\right)$ oe or $\sqrt{9} : \sqrt{4}\ (= 3:2)$ or $\frac{\sqrt{9}}{\sqrt{4}}\left(= \frac{3}{2}\right)$ oe		4	M1 for finding the ratio or fraction for lengths for A : B or B : A
	$\sqrt[3]{125} : \sqrt[3]{343}\ (= 5:7)$ or $\frac{\sqrt[3]{125}}{\sqrt[3]{343}}\left(= \frac{5}{7}\right)$ oe or $\sqrt[3]{343} : \sqrt[3]{125}\ (= 7:5)$ or $\frac{\sqrt[3]{343}}{\sqrt[3]{125}}\left(= \frac{7}{5}\right)$ oe			M1 for finding the ratio or fraction for lengths for B : C or C : B
	A : B = 10 : 15 and B : C = 15 : 21 oe			M1 for mainpulating A : B and B : C so that both B values are equal
		10 : 21		A1 Allow 1 : 2.1 SC3 for 21 : 10 with all working shown
				Total 4 marks

19	(a)		$-\frac{4}{3}$	1	B1
	(b)	$3(x^2 + 4x) + 19$ **and** $3[(x + 2)^2 - 2^2] + 19$ **or** $3\left(x^2 + 4x + \frac{19}{3}\right)$ **and** $3\left((x+2)^2 - 2^2 + \frac{19}{3}\right)$ **or** a = 3 and $2ab$ = 12 oe and $b^2a + c$ = 19 oe **or** a = 3 and $b = \frac{12}{2\times 3}$ oe and $c = -\frac{12^2}{4\times 3} + 19$ oe			M1 for correctly taking out a factor of 3 and correctly completing the square **or** for equating coefficients by expanding $a(x+b)^2 + c = ax^2 + 2abx + b^2a + c$ **or** for equating coefficients by using $ax^2 + bx + c = a\left(x + \frac{b}{2a}\right)^2 - \frac{b^2}{4a} + c$
			$3(x + 2)^2 + 7$		A1 accept a = 3, b = 2, c = 7
					Total 3 marks