Question	Answer	Mark	Mark scheme	Additional guidance
16 (a)	$5\sqrt{7}$	M1	for $\frac{35}{\sqrt{7}}\times\frac{\sqrt{7}}{\sqrt{7}}$ $(=\frac{35\sqrt{7}}{7})$ or $\frac{35}{\sqrt{7}}\times\frac{-\sqrt{7}}{-\sqrt{7}}$ $(=\frac{-35\sqrt{7}}{-7})$	
		A1	for $5\sqrt{7}$ or $\sqrt{175}$	
(b)	$a = 7$, $b = 5$	B1	for $\sqrt{27}=3\sqrt{3}$ or $2\sqrt{27}=6\sqrt{3}$	B1 can be awarded whenever this is seen, which might be later in the process.
		P1	for process to rationalise the denominator, eg $\frac{\sqrt{27}-1}{2-\sqrt{3}}\times\frac{2+\sqrt{3}}{2+\sqrt{3}}$ **or** $\frac{3\sqrt{3}-1}{2-\sqrt{3}}\times\frac{2+\sqrt{3}}{2+\sqrt{3}}$ oe	
		P1	(dep on previous P1) for expanding terms, condone one error in numerator or denominator, eg $\frac{2\sqrt{27}+\sqrt{27}\sqrt{3}-2-\sqrt{3}}{4+2\sqrt{3}-2\sqrt{3}-\sqrt{3}\sqrt{3}}$ **or** $\frac{6\sqrt{3}+3\sqrt{3}\sqrt{3}-2-\sqrt{3}}{4+2\sqrt{3}-2\sqrt{3}-\sqrt{3}\sqrt{3}}$ **or** $6\sqrt{3}+9-2-\sqrt{3}$ oe	
		A1	for $a = 7$, $b = 5$	Accept $7+5\sqrt{3}$