Question	Answer	Marks	Guidance
(a)	$\tan A = \dfrac{12}{5}$ or $\cos A = \dfrac{5}{13}$ or $\sin A = \dfrac{12}{13}$	M1	OR $\tan B = \dfrac{5}{12}$ or $\cos B = \dfrac{12}{13}$ or $\sin B = \dfrac{5}{13}$
	$A = 1.176$ $B = 0.3948$	A1	Allow 1.18 or 67.4°, Allow 0.395 or 22.6°. May be implied by $\dfrac{\pi}{2} - 1.176$
	$DE = 4$	B1	If trigonometry used accept AWRT 4.00
	Arcs = $5 \times their\,1.176$ and $8 \times their\,0.3948$	M1	Or corresponding calculations in degrees.
	[Perimeter = 5.880 + 3.158 + 4 =] 13.0	A1	Accept 13. If *DE* is outside the given range this mark cannot be awarded.
		5	
(b)	Area of triangle = $\frac{1}{2} \times 5 \times their\,12$ [= 30]	B1 FT	
	Area of sectors = $\frac{1}{2} \times 5^2 \times their\,1.176 + \frac{1}{2} \times 8^2 \times their\,0.3948$	M1	Or corresponding calculations in degrees
	[Area = 30 – 14.70 – 12.63 =] 2.67	A1	Allow 2.66 to 2.67
		3	