10	$\sin 52 = \frac{12 \div 2}{r}$ oe **or** $\frac{r}{\sin 90} = \frac{6}{\sin 52}$ oe **or** $\cos(90-52) = \frac{12 \div 2}{r}$ oe **or** $(r^2 =)(12 \div 2)^2 + \left(\frac{12 \div 2}{\tan 52}\right)^2$ oe $\left[r^2 = 6^2 + 4.687...^2\right]$ **or** $\frac{r}{\sin 38} = \frac{12}{\sin 104}$ oe		4	M1	A correct trig statement for the radius use of tan must also include a correct Pythagoras statement.
	$r = \frac{6}{\sin 52}$ (=7.614) oe **or** $r = \frac{6}{\cos 38}$ oe **or** $(r =)\sqrt{(12 \div 2)^2 + \left(\frac{12 \div 2}{\tan 52}\right)^2}$ $\left[r = \sqrt{6^2 + 4.687...^2}\right]$ oe **or** $\frac{12 \sin 38}{\sin 104}$ oe			M1	A correct method to find the radius of the circle use of tan must also use Pythagoras to find an expression for *r*
	(Area =) $\pi \times (\text{"7.61..."})^2$			M1	the radius must come from a completely correct method
	Correct answer scores full marks (unless from obvious incorrect working)	182		A1	Accept 181 - 183
					Total 4 marks