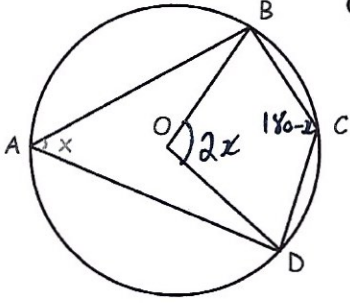
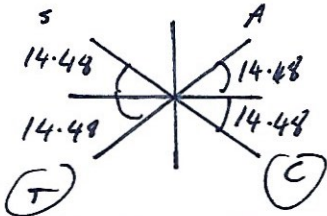


18th February	
<p>$\angle BAD = x$</p> <p>Express $\angle BCD$ in terms of x</p> <p style="text-align: center;">$180 - x$</p>	 <p style="text-align: right;">Corbettmaths</p>
<p>Express the obtuse $\angle BOD$ in terms of x</p> <p style="text-align: center;">$2x$</p>	
<p>Solve $\sin \theta = -0.25$ for $0^\circ \leq \theta \leq 360^\circ$</p> <p style="text-align: center;">$\sin^{-1} 0.25 = 14.48^\circ$</p> 	<p style="text-align: center;">$\theta = 194.48^\circ, 345.52^\circ$</p>
<p>Show that $(2x + 1)$ is a factor of $2x^3 + 9x^2 + 6x + 1$</p> <p style="text-align: right;">$2x = -1$ $x = -\frac{1}{2}$</p> <p>Let $f(x) = 2x^3 + 9x^2 + 6x + 1$</p> <p style="text-align: center;">$f(-\frac{1}{2}) = -\frac{1}{4} + \frac{9}{4} - 3 + 1$</p> <p style="text-align: center;">$= 0$</p>	<p style="text-align: center;">$\therefore (2x + 1)$ is a factor of $2x^3 + 9x^2 + 6x + 1$</p>
<p>Write $2x^3 + 9x^2 + 6x + 1$ in the form $(2x + 1)(x^2 + px + q)$</p> <p style="text-align: center;">$q = 1$</p> <p>x^2 xxxx $2px^2 + x^2 = 9x^2$</p> <p style="text-align: center;">$\therefore p = 4$</p>	<p style="text-align: center;">$(2x + 1)(x^2 + 4x + 1)$</p>