

Question 21358

Please find the angles which are not given. Please see the pdf and find the angle "e".

Solution.

Since $SA \parallel CE$ and SE intersects them, then $\angle S = \angle E = 44^\circ$.

The sides SH and AH of the triangle $\triangle SHA$ are equal to a radius of a circle. Thus, $SH = AH$. It follows that $\angle S = \angle A = 44^\circ$ and $\angle H = 180^\circ - 2 \cdot 44^\circ = 92^\circ$.

So $\angle e = 180^\circ - 92^\circ = 88^\circ$.

Since $SA \parallel CE$ and CA intersects them, we have $\angle A = \angle C = 44^\circ$.

Answer. $\angle e = 88^\circ$.