

## The great angle chase: Student worksheet

<http://topdrawer.aamt.edu.au/Geometric-reasoning/Good-teaching/Looking-beyond-the-lines/Visualising-relationships/Great-angle-chase>

In the diagram below,  $O$  is the centre of the circle. The figure is not drawn to scale.

$GH$  is a tangent to the circle at  $P$ .  $PS$  is a diameter and  $PQ = RS$ .

$\angle HPQ = 25^\circ$ ,  $\angle PIQ = 100^\circ$  and  $\angle UPT = 35^\circ$ .

Do not construct additional lines in the diagram.

- Write in the size of all the angles.
- Name any cyclic quadrilaterals.
- Name all equal line segments.
- Name all equal arcs.
- Name any parallel lines.

