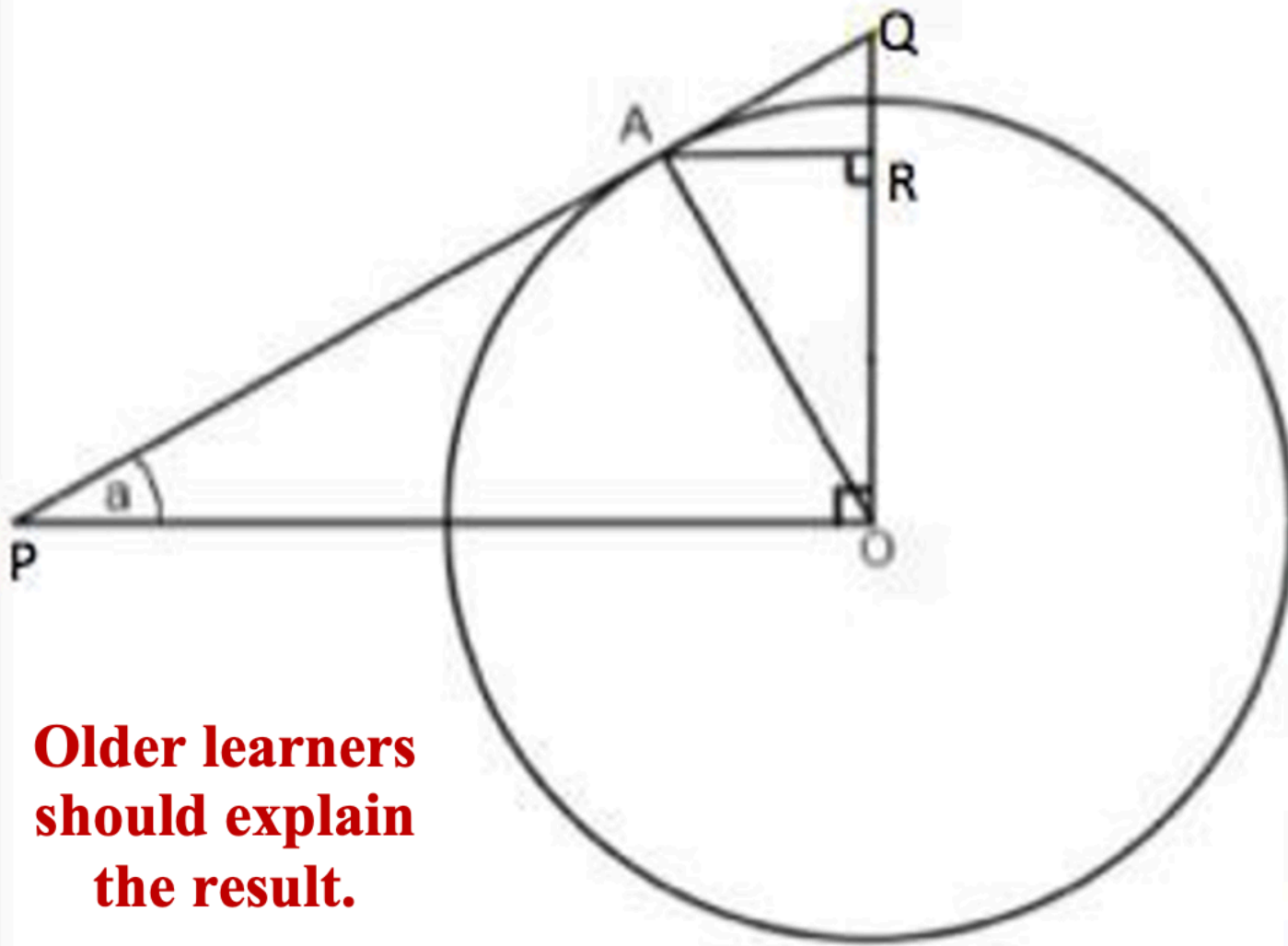




GEOMETRIC TRIG

<https://aiminghigh.aimssec.ac.za/geometric-trig/>

This is a circle of unit radius with a tangent at A. Find the lengths $\sin a$, $\cos a$, $\tan a$, $1/\sin a$, $1/\cos a$ and $1/\tan a$ in the diagram, and the areas of the 3 triangular regions.



Older learners should explain the result.

ACTIVITY FOR ALL

Make your own copy of the diagram. Measure the lengths and the angle a . Remember that $OA=1$ unit. Scale your measurements. Use a calculator to find which lengths have the values of the trig. ratios $\sin a$, $\cos a$, $\tan a$, $1/\sin a$, $1/\cos a$ and $1/\tan a$.