

# Calculating angles with circles

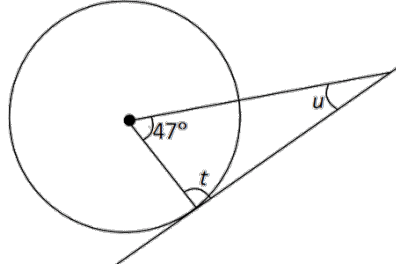
This task is about the angle between a tangent and a radius, and the sum of angles in a triangle and the sum of angles in a quadrilateral.

Complete the following sentences by finding the size of the marked angles.

In each case, justify your answer.

The centre of each circle is marked with a dot.

a)

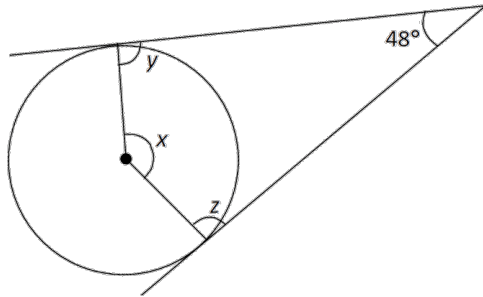


[Not drawn to scale]

Angle  $t =$    $^\circ$  because ...

Angle  $u =$    $^\circ$  because ...

b)



[Not drawn to scale]

Angles  $y + z =$    $^\circ$

Angle  $x =$    $^\circ$  because ...