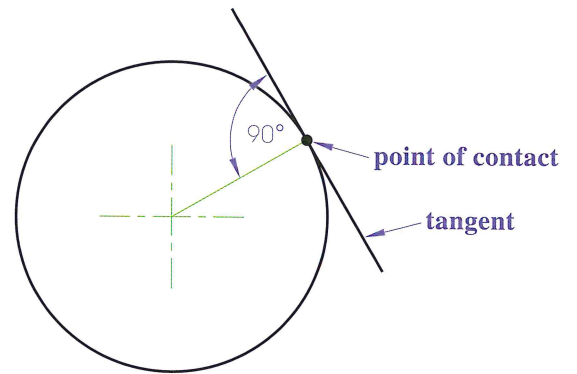


Tangents to a Circle

A **tangent** to a circle is a line that touches the circumference at one point only, called the **point of contact**.

The angle between the radius of a circle and a tangent at the point of contact is 90° .

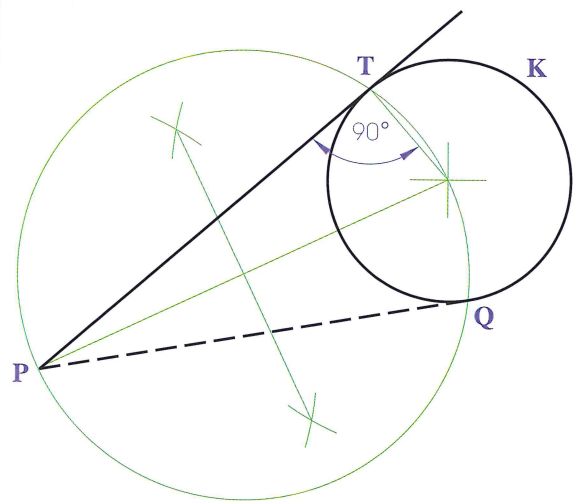


Drawing a Tangent from a Point Outside A Circle

Example

Draw a tangent to the given circle K from the point P.

1. Join P to the centre of the circle.
2. Bisect this line and draw the semicircle cutting the circumference of the circle at T. This is the **point of contact**.
3. Join PT. This is a **tangent** from P.



A second tangent PQ can be drawn as shown.

This construction is based on the angle in a semicircle (see page 186).

Exercises

1. Reproduce the given drawing of a **sports trophy** showing clearly how the tangents to the circle are constructed.

