

When we draw a triangle inside a semi-circle and the two shorter sides meet at one point on the circumference, the angle will always be right-angled.

Knowing this can help with finding missing angles, like RPQ in this example.

One angle is given at 65 degrees, and the angle where the point of the triangle meets the semicircle is a right angle, 90 degrees.

The angles in a triangle always add up to 180 degrees so to find the size of angle RPQ subtract both the known angles in the triangle from 180 degrees.

RPQ equals 180 degrees subtract 90 degrees subtract 65 degrees, which equals 25 degrees

RPQ equals 25 degrees.