1. In Fig. ??, PQ is a tangent at point C to a circle with center O. If AB is a diameter and  $\angle CAB = 30^{\circ}$ , find  $\angle PCA$ .

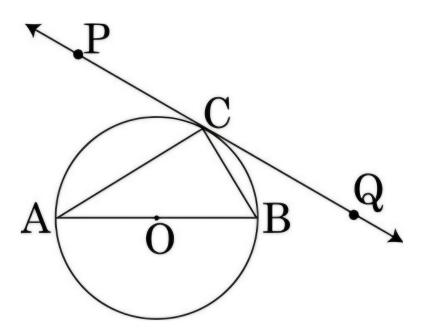


Figure 1: CircleABC