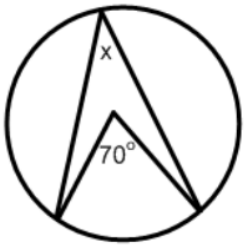
First name: _____ Last name:_____ ID: _____

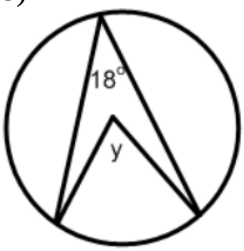
Geometry (2) Homework

1. Find the measure of the unknowns.

a)



b)



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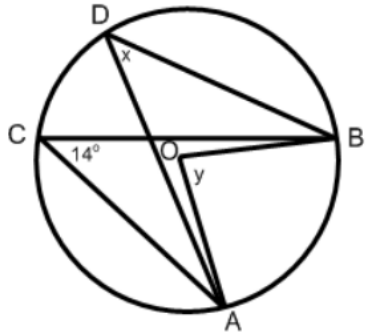
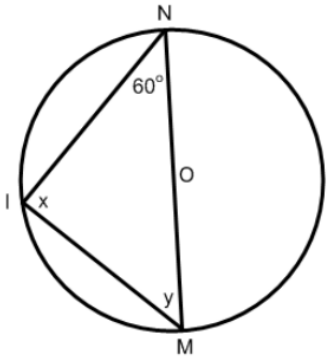


d)



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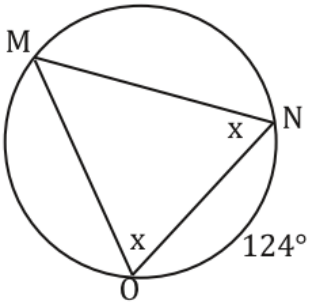
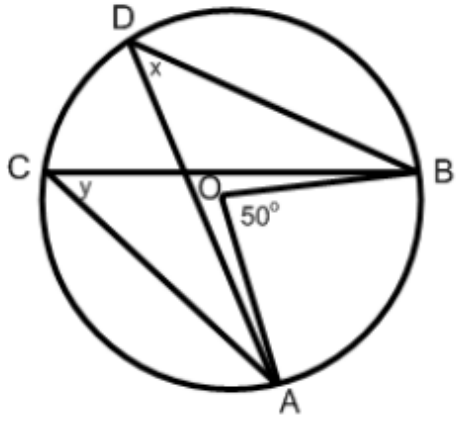


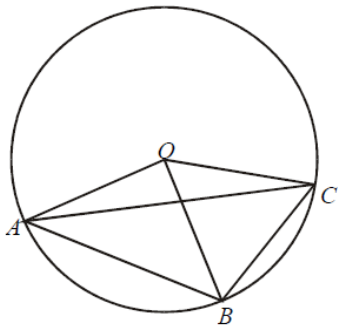
f)



2. If the circumference of a large circle is twice of that of a small circle, then the ratio of the area of large circle to small circle is?

3. The radius of two circles are 5cm and 3cm， if they tangent to each other, find the distance of two centers.

4. In the diagram, *O* is the centre of the circle.
Angle *OAC* = 12° and angle *BOC* = 80°.
Calculate the size of the following angles, giving a geometrical reason for each of your answers.



(a) Angle *OCA*

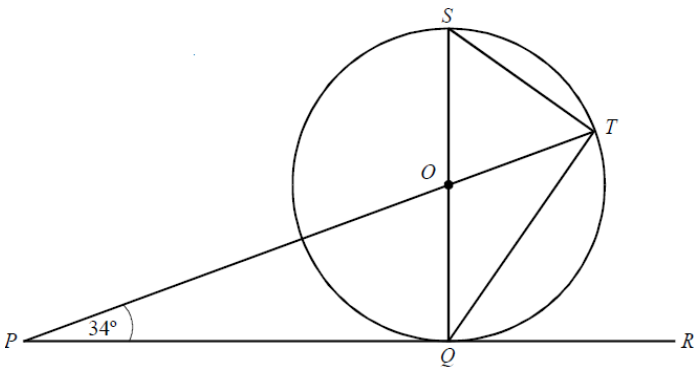
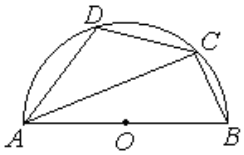
(b) Angle *AOC*

(c) Angle *ACB*

(d) Angle *ABC*

5. The line segment *QS* is a diameter of the circle.

Angle PQO is 90°
T is a point on the circumference of the circle such that *POT* is a straight line.
The angle *OPQ* is 34°.
Calculate the size of angle *TQR*.



6. In the figure below，*AB* is the diameter of circle *O*，∠*BAC*=20°，*D* is an arbitrary point on $\overset{\frown}{AC}$，what is the measure of ∠*D*?