Name: _____

Inscribed Angles and Their Measures

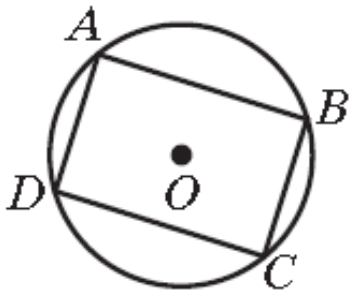
Exercise 1: Triangle ABC is inscribed in a circle and $mAB : mBC : mAC = 2:3:7$. Find:

1) mAB
2) mBC
3) mAC
4) $m\angle A$
5) $m\angle B$
6) $m\angle C$

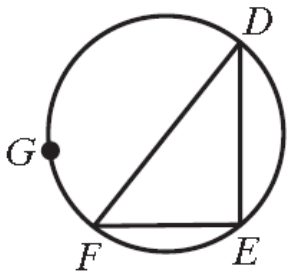
Exercise 2: Triangle ABC is inscribed in a circle. If mAB =100 and mBC =130, prove that $\triangle ABC$ is an isosceles triangle.

Exercise 3: Parallelogram ABCD is inscribed in a circle.

1) Prove that $mABC = mADC$
2) Find $mABC$ and $mADC$
3) Prove that the parallelogram ABCD is a rectangle



Exercise 4: Triangle DEF is inscribed in a circle and G is any point not on DEF . If $mDE + mEF = mFGD$, show that $\triangle DEF$ is a right triangle.



Exercise 9: In a circle of center O, $\overline{AOC}$ and $\overline{BOD}$ are diameters. If $\overline{AB} \cong \overline{CD}$, prove that $\triangle ABC \cong \triangle DCB$