1. Determine the arc measure.

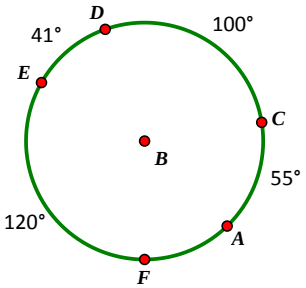
a)

mDF = _____

$mECA$ = _____

mAF = _____

$mCFD$ = _____



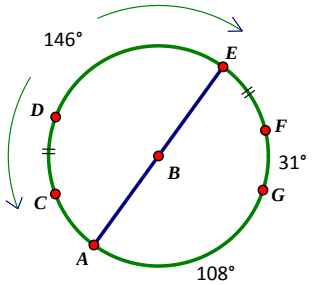
b)

mAC = _____

$mDAG$ = _____

mAD = _____

$mDAF$ = _____



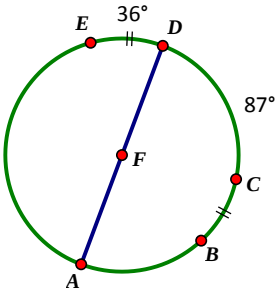
c)

mAE = _____

mAB = _____

$mCDB$ = _____

mBD = _____



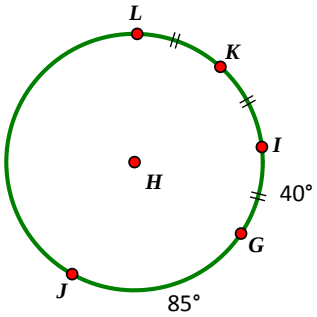
d)

mLJ = _____

mKJ = _____

$mGJK$ = _____

$mKLI$ = _____



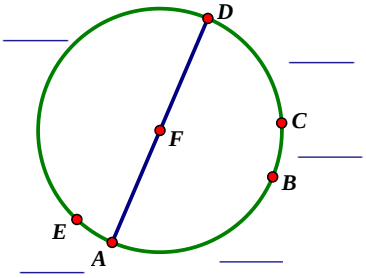
2. Determine the measure of the missing arcs on the circle.

a) Circle F

$mAC = 117°$

$mBE = 111°$

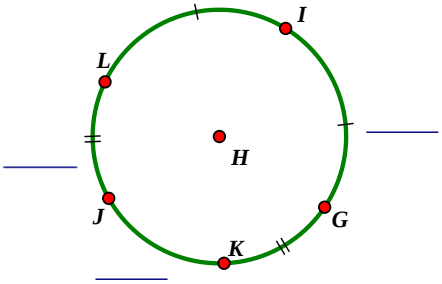
$mBA = 91°$



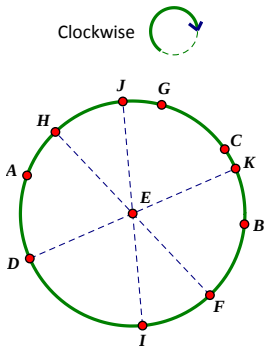
b) Circle H

$JLK = 302°$

$LG = 168°$



3. From the given diagram, determine whether the arcs are Major, Minor or Semi-Circle. To describe the arc without giving it way through notation we will refer to clockwise and counterclockwise (counter cw).



a) F to G, clockwise Major Minor Semi

b) A to F, clockwise Major Minor Semi

c) J to C, clockwise Major Minor Semi

d) K to D, clockwise Major Minor Semi

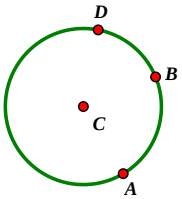
e) D to I, counter cw Major Minor Semi

f) C to A, counter cw Major Minor Semi

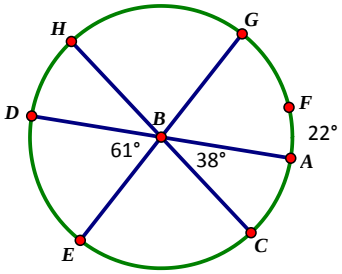
j) F to J, clockwise Major Minor Semi

k) G to I, counter cw Major Minor Semi

4. The teacher asks a student to write the name for the arc from A to B on the board. Jackie comes up writes AB or BA. Jeff raises his hand and says that he has a different answer. What might his answer be if it is different than Jackie's?



5. Given Circle B with diameters $\overline{HC}$, $\overline{EG}$ and $\overline{DA}$.



a) m∠DBH = _____ b) $mDCE$ = _____

c) mHG = _____ d) $mHCF$ = _____

e) m∠HBA = _____ f) m∠DBA = _____

6. Given circle M, $HG \cong HTG$. How could this be?

7. Determine the missing information.

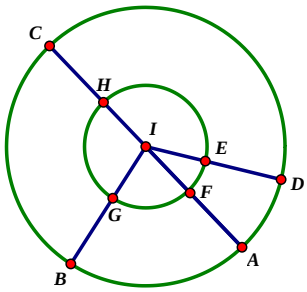
a) Given concentric circles with mGF = 76°, m∠HIE = 147° and $\overline{CA}$ & $\overline{FH}$ are diameters.

mCB = _____

mHE = _____

$mBDC$ = _____

m∠CIB = _____



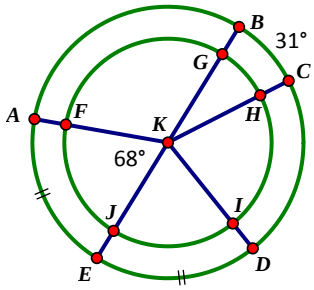
b) Given concentric circles with mBC = 31°, m∠FKJ = 68° and $\overline{EB}$ is a diameter.

mED = _____

m∠GKH= _____

$mABD$ = _____

m∠AKB = _____



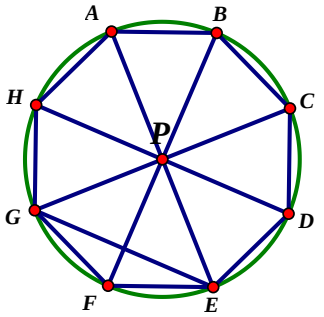
8. Given a regular octagon. Determine the missing information

a) m∠APB = _____ b) m∠HPF = _____

c) mAE = _____ d) $mGEA$ = _____

e) m∠GPF = _____ f) m∠PAH = _____

g) m∠PGE = _____ h) If HD = 12 cm, what is GE = _____ (E)



9. Points A, B, C, D, and E are placed on circle R in this order such that there are five congruent arcs. What is the $mBCE$?