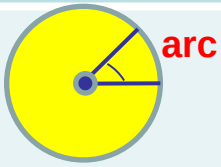
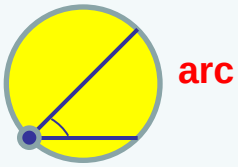
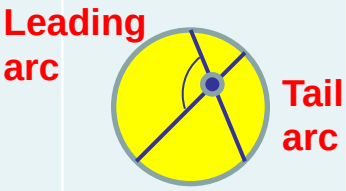
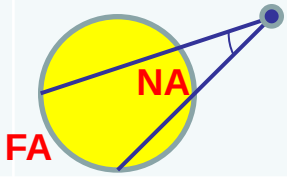
Chapter 10 Angles Worksheet

Name: _____

Angle	Vertex Location	Sides	Formula (arcs)	Picture
Central	Center	Radii	= arc	
Inscribed	Edge	Chords	= ½ arc	
Interior	Inside (not at center)	Chords	= ½ (LA + TA)	
Exterior	Outside	Secants Tangents	= ½ (Far arc – Near arc)	

Remember:

Vertex is the corner point (hinge point of middle letter) of the angle.
Arcs are ***around the edge*** of the circle.
Circle's arcs always sum to 360°

Major arcs measure > 180
Minor arcs measure < 180
Semi-circles measure = 180 (formed by diameters)

Central angle is twice the inscribed angle with the same arc

Leading and tail arcs in interior angles are formed by the vertical angle pair (follow the "X" out to the edge of the circle)

FA = Far Arc (or the big arc) NA = Near Arc (or the little arc)

Remember Vertical Angles, Linear Pairs and 3 angle in a triangle rules!!!

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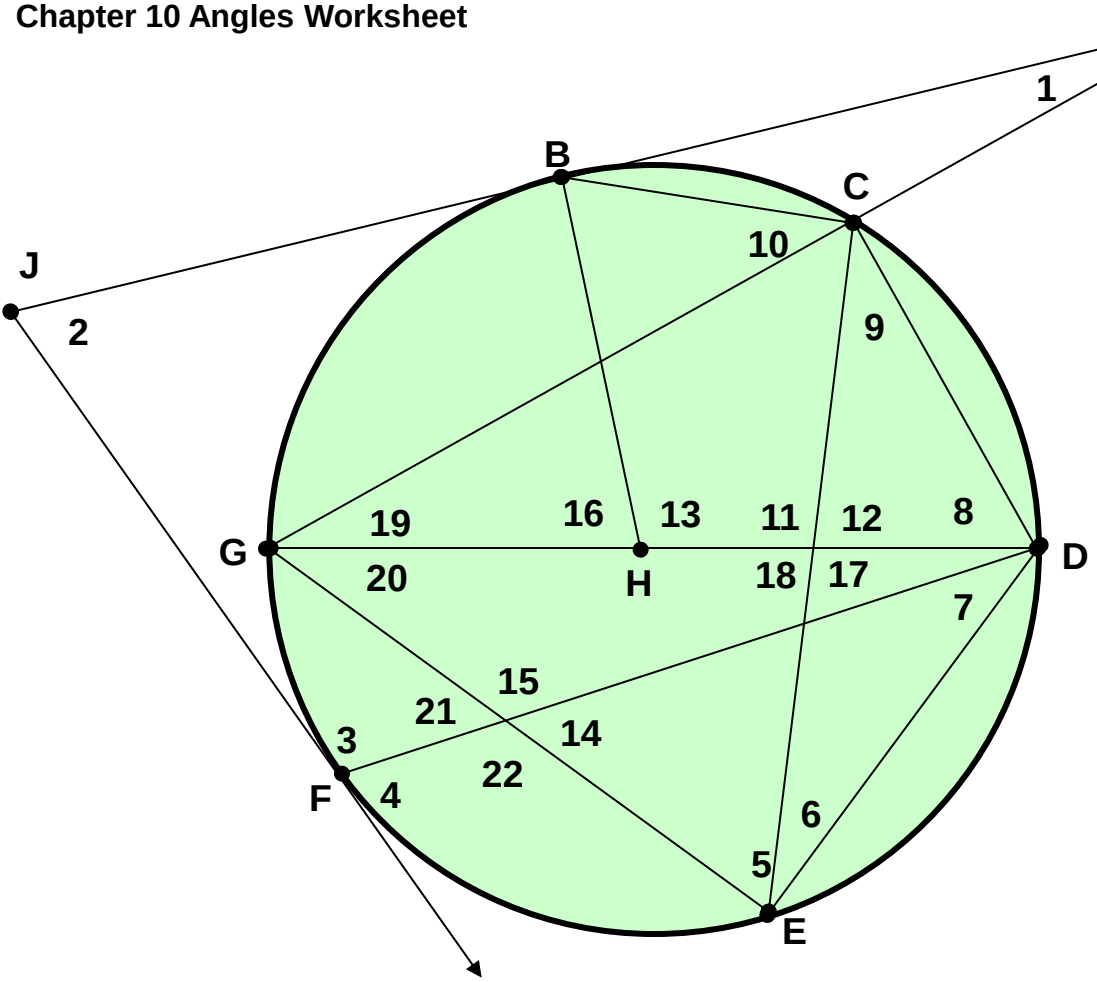

Arcs

BC = _____°

CD = _____°

DE = _____°

EF = _____°

FG = _____°

GB = _____°

Given: GD is a diameter, H is the center of the circle, JF and AJ are tangents, AG is a secant, m arc BC = 40°, m arc CD = 60°, m arc GF = 36°, and m arc DE= 76°.

Label all the arcs around the edge of the circle with their measures. Use information above to find any missing arc values.

Identify all *central* angles by angle number and find their measure:

Formula:

m∠ ____ = _____°

m∠ ____ = _____°

∠ = _____

Identify all *exterior* angles by angle number and find their measure:

m∠ ____ = _____°

m∠ ____ = _____°

∠ = _____

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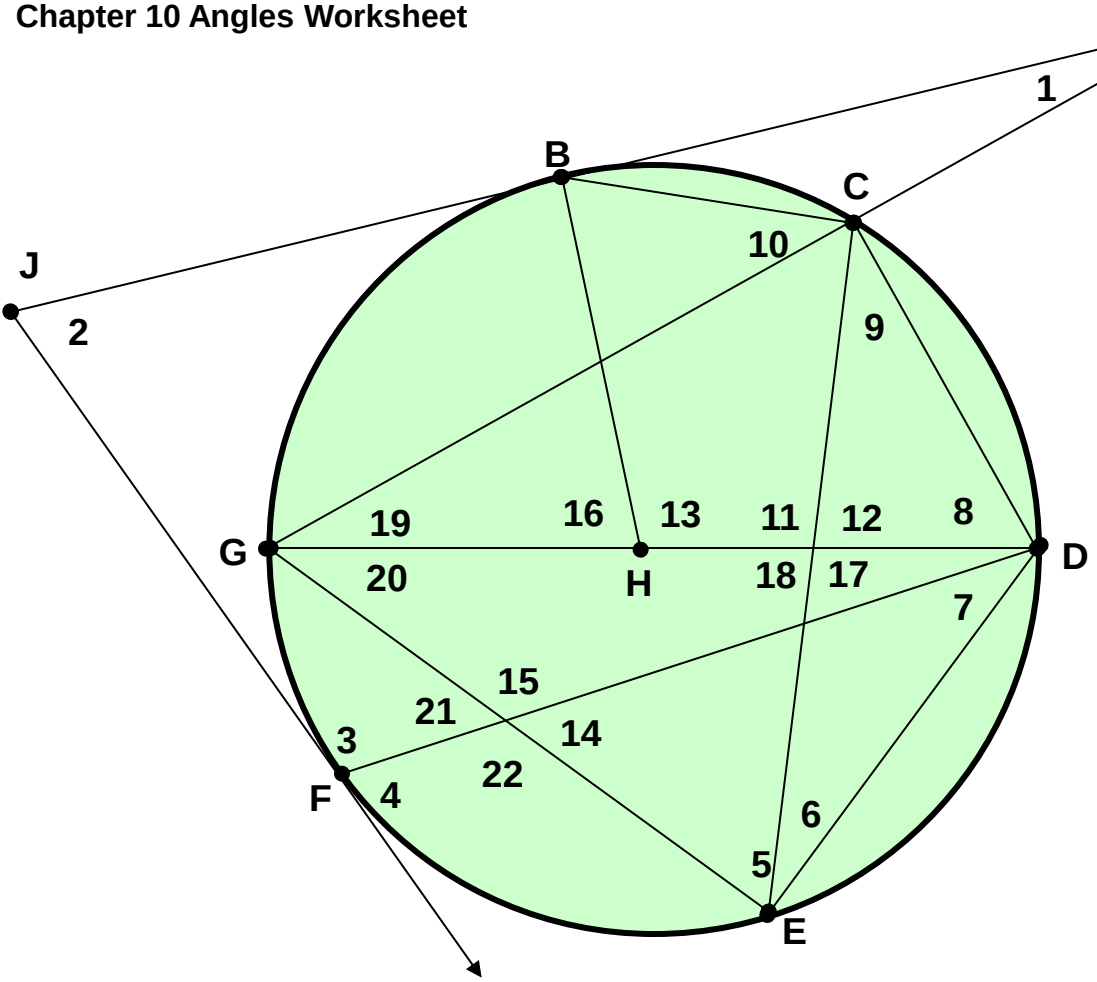

Arcs

BC = _____°

CD = _____°

DE = _____°

EF = _____°

FG = _____°

GB = _____°

Given: GD is a diameter, H is the center of the circle, JF and AJ are tangents, AG is a secant, m arc BC = 40°, m arc CD = 60°, m arc GF = 36°, and m arc DE= 76°.

Identify all *inscribed* angles by angle number and find their measure:

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

Formula: _____

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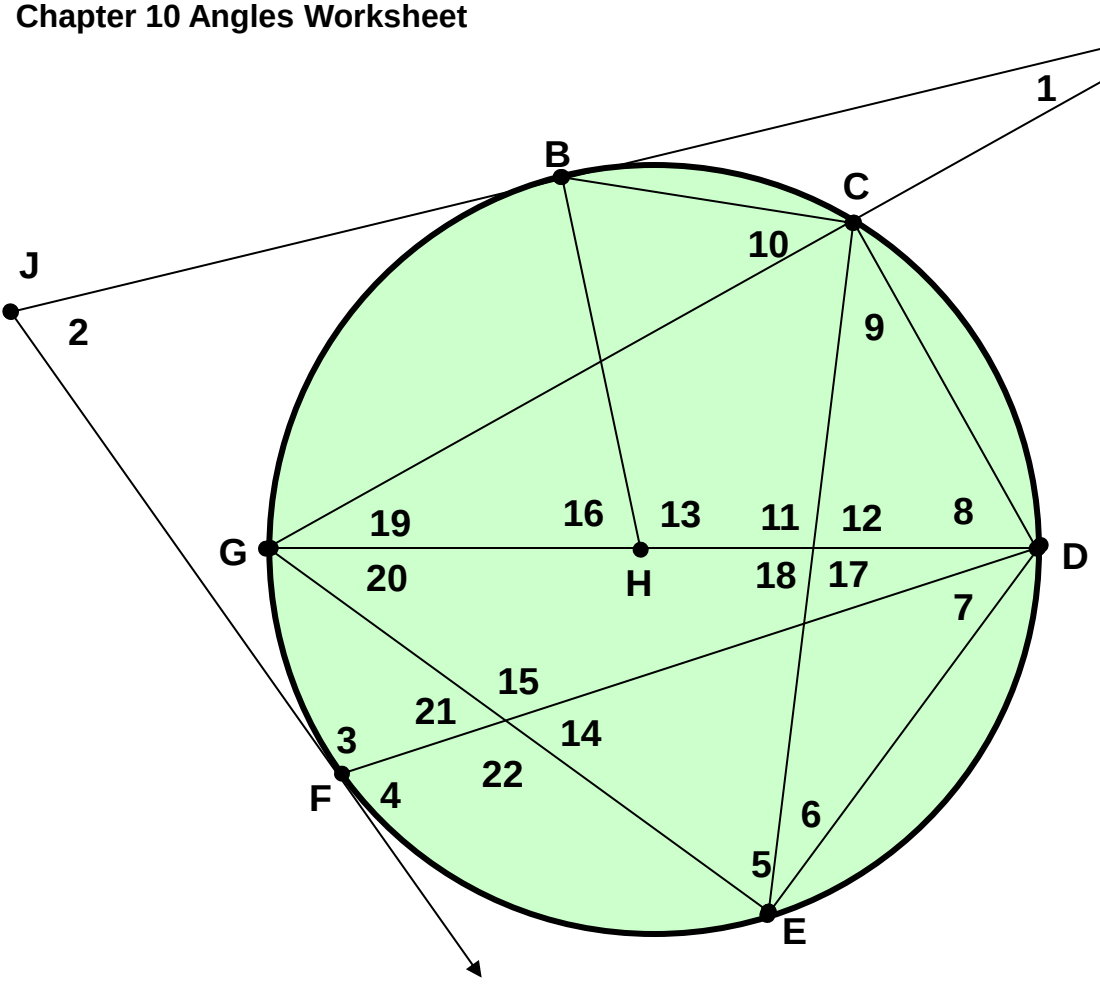

Arcs

BC = _____°

CD = _____°

DE = _____°

EF = _____°

FG = _____°

GB = _____°

Given: GD is a diameter, H is the center of the circle, JF and AJ are tangents, AG is a secant, m arc BC = 40°, m arc CD = 60°, m arc GF = 36°, and m arc DE= 76°.

Identify all *interior* angles by angle number and find their measure:

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

m∠ _____ = _____°

Formula: _____

Extra Credit: m∠HBJ = _____° **m∠GCD = _____°**