Accelerated Geometry **Name**_____
10.5 Practice **Date**_____

Diagrams are not drawn to scale!

1) Given: Circle O with diameter AC.

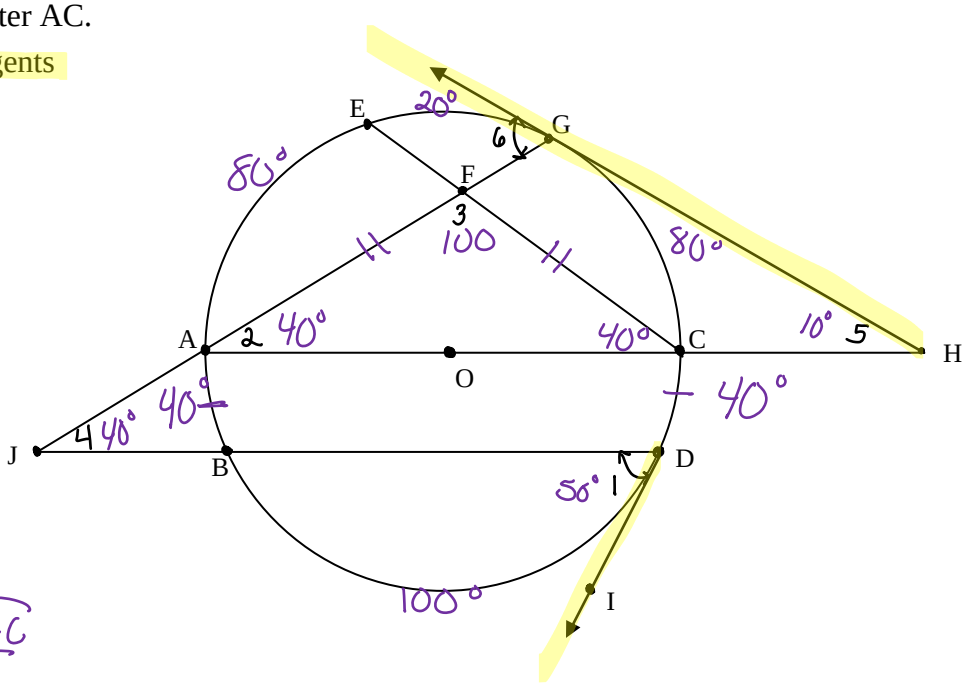
$\overrightarrow{DI}$ and $\overrightarrow{HG}$ are tangents

$mBD = 100$

$AB \cong CD$

$mEG = 20$

$\overline{AF} \cong \overline{CF}$



Find:

$m\angle 1 =$ 50

$m\angle 2 =$ 40

$m\angle 3 =$ 100 $= \frac{\overset{\frown}{AC} + \overset{\frown}{EG}}{2}$

$m\angle 4 =$ 40 $= \frac{\overset{\frown}{GD} - \overset{\frown}{AB}}{2}$

$m\angle 5 =$ 10

$m\angle 6 =$ 50° $\rightarrow \frac{\overset{\frown}{AG} - \overset{\frown}{GC}}{2}$

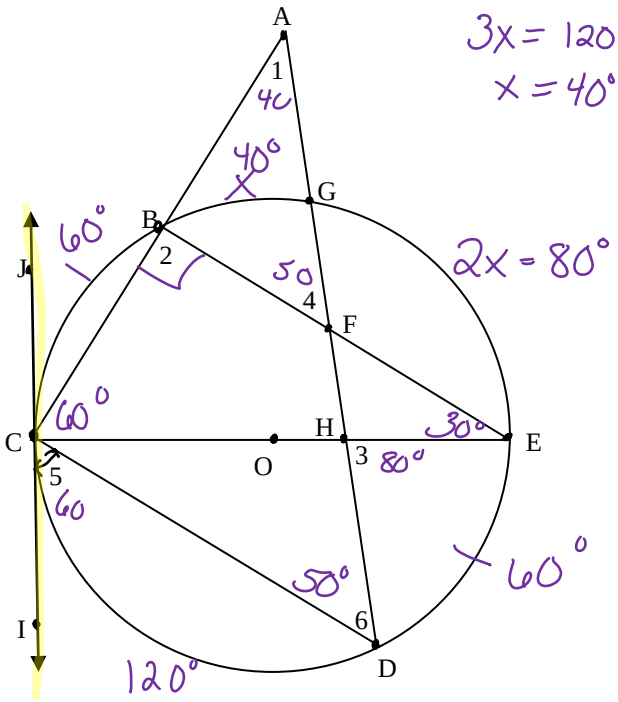
2) Given: Circle O with diameter EC = 12

$\overleftrightarrow{JI}$ tangent at point C

$m\angle BCE = 60$

$EG : GB = 2 : 1$

$ED \cong BC$



$3x = 120 = \overset{\frown}{BE}$

$x = 40°$

$2x = 80°$

Find:

$m\angle 1=$ 40 $= \frac{\overset{\frown}{CD} - \overset{\frown}{BG}}{2}$

$m\angle 2=$ 90 $\frac{\overset{\frown}{CE}}{2}$

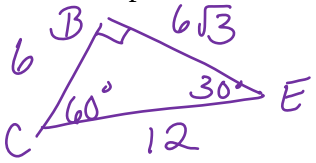
$m\angle 3 =$ 80 $= \frac{\overset{\frown}{ED} + \overset{\frown}{GC}}{2}$

$m\angle 4 =$ 50 $= \frac{\overset{\frown}{BG} + \overset{\frown}{DE}}{2}$

$m\angle 5 =$ 60 $= \frac{\overset{\frown}{CD}}{2}$

$\frac{\overset{\frown}{CG}}{2} = m\angle 6 =$ ____

Exact value of the perimeter of ΔCEB



Per $= 18 + 6\sqrt{3}$

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3) Given: Circle O.

$\overrightarrow{CB}$ and $\overrightarrow{CH}$ are tangents

$m\angle 2 = 5$

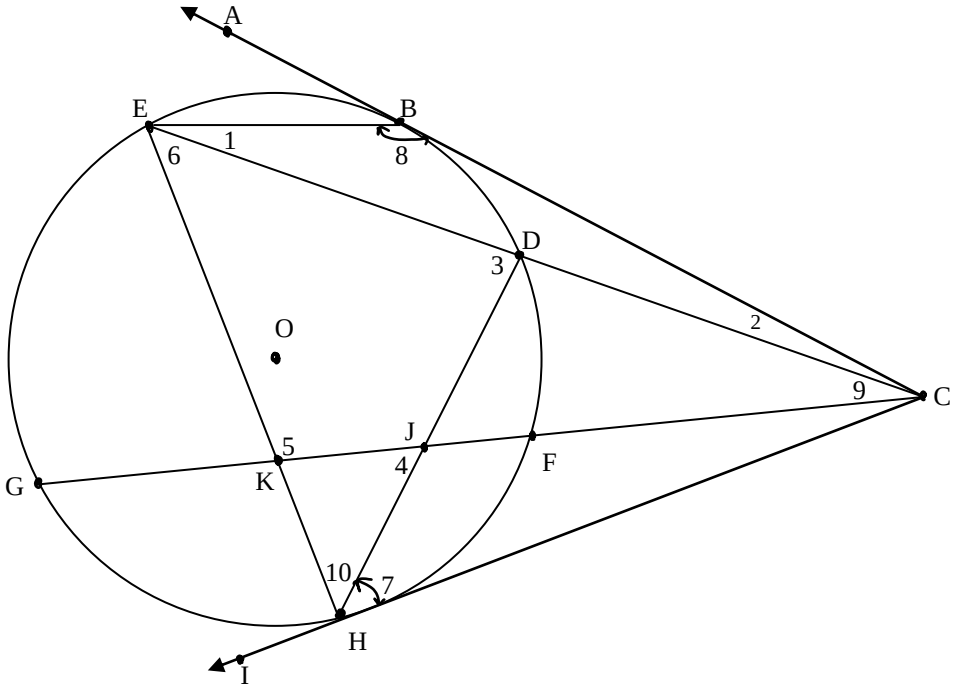
$m\angle 1 = 15$

$DF \cong EB$

$EG \cong FH$

$mEG = -2x^2 - 42x - 28$

$mFH = 3x^2 + 47x - 46$



Find:

$m\angle 3 =$ ____

$m\angle 4 =$ ____

$m\angle 5 =$ ____

$m\angle 6 =$ ____

$m\angle 7 =$ ____

$m\angle 8 =$ ____

$m\angle 9 =$ ____

$m\angle 10 =$ ____