

1.

Convert $36\frac{1}{9}^\circ$ to degrees, minutes, seconds form.

$$= 36^\circ \frac{60}{9}' = 36^\circ \frac{20}{3}' = 36^\circ 6\frac{2}{3}' = 36^\circ 6'40''$$

2.

$$\overrightarrow{AR} \cup \overrightarrow{LH} = \overleftrightarrow{AR}$$

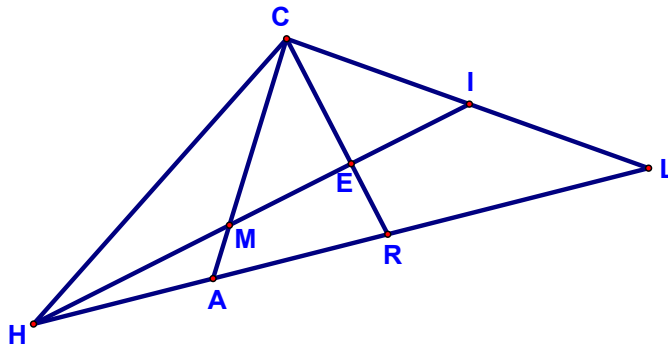
$$\overrightarrow{RL} \cap \overrightarrow{RC} = R$$

$$\overleftrightarrow{IE} \cap \overleftrightarrow{LR} = H$$

$$\overrightarrow{IE} \cap \overrightarrow{HM} = \overleftrightarrow{HI}$$

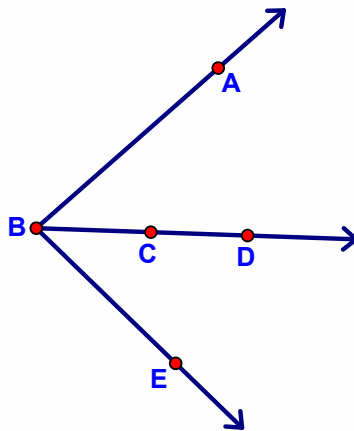
$$\overrightarrow{MC} \cup \overrightarrow{MI} = \angle CMI$$

$$\overrightarrow{EC} \cap \overrightarrow{AL} = \emptyset$$



3.

Draw a diagram in which $\angle ABD \cap \angle CBE = \overrightarrow{BC}$

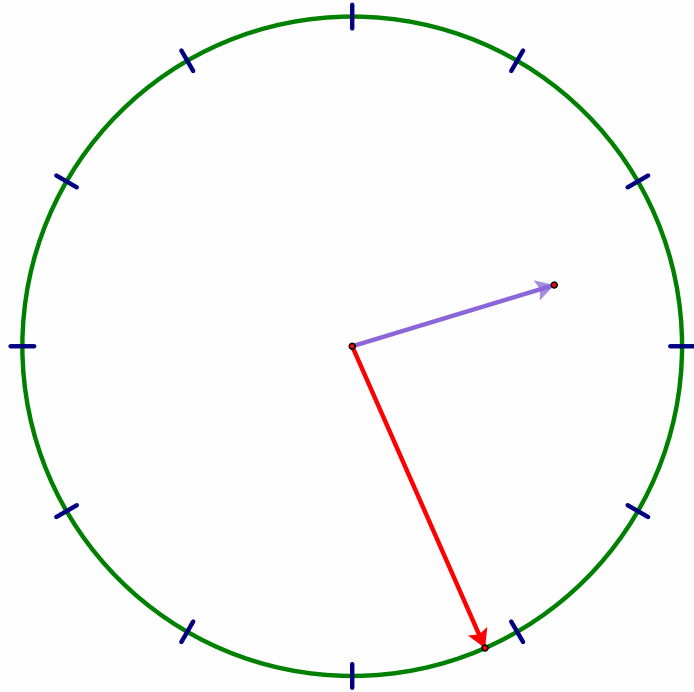


4.

Find the measure of the acute angle formed by the hand of the clock at 2:26.

Whole sections: 60°
 Min hand: 6°
 Hour hand: 17°

 83°



5.

Find $m\angle ENY$

$$4x + y + x + 25 = 180$$

$$\Rightarrow 5x + y = 155$$

$$\Rightarrow y = 155 - 5x$$

$$2y - 10 + 4x + y = 180$$

$$\Rightarrow 4x + 3y = 190$$

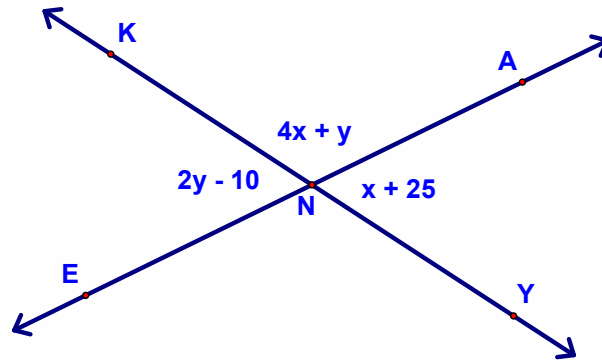
$$4x + 3(155 - 5x) = 190$$

$$\Rightarrow 11x = 275$$

$$\Rightarrow x = 25$$

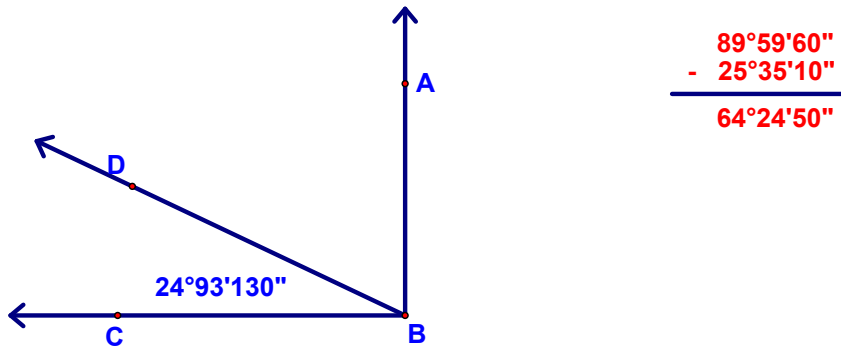
$$\Rightarrow y = 30$$

$$\therefore m\angle ENY = 180 - (25+25) = 130^\circ$$



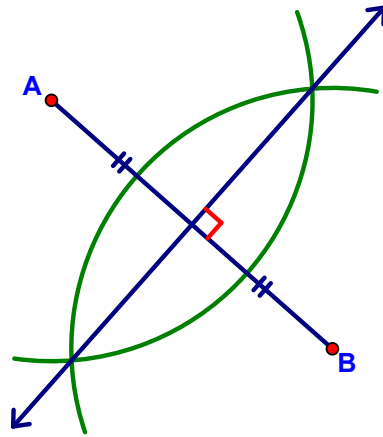
6.

If $\angle ABC$ is right, find $m\angle ABD$.



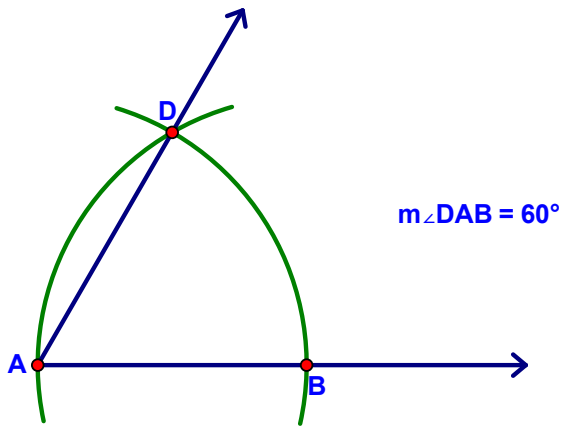
7.

Construct the \perp bisector of \overline{AB}



8.

Construct $\angle DAB$, using the given ray as one side, and whose measure is 60°



9.

Construct an angle whose measure is 45° using the given ray as one side.

