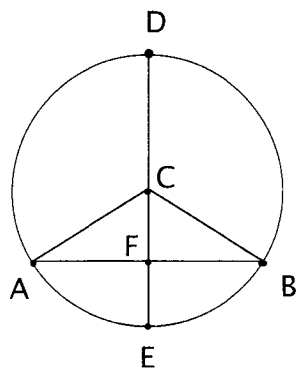


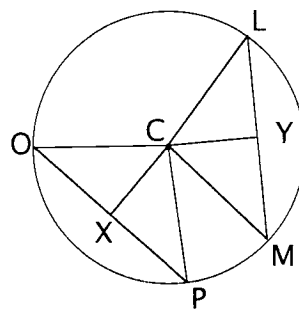
2.

Statements	Reasons
$\overline{DE} \perp \overline{AB}$	Given
$\overline{AC} \cong \overline{BC}$	Radius of a circle
$\overline{FC} \cong \overline{FC}$	Reflexive
$\triangle FCA \cong \triangle FCB$	HL
$\angle ACE \cong \angle BCE$	CPCTRC
$\widehat{AE} \cong \widehat{BE}$	Property of central angle



3.

Statements	Reasons
$\overline{OP} \cong \overline{LM}$	Given
$\overline{OC} \cong \overline{LC}$	Radius of a circle
$\overline{PC} \cong \overline{MC}$	Radius of a circle
$\triangle CPO \cong \triangle CML$	SSS
$\overline{OX} \cong \overline{LY}$	Definition of Bisector
$\triangle OCX \cong \triangle LCY$	HL
$\overline{XC} \cong \overline{YC}$	CPCTRC



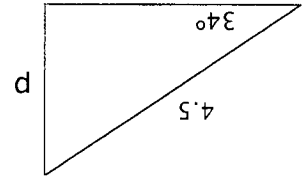
Honors Lesson 28

- $67 = \frac{1}{2}X$
 $134^\circ = X$
 $50 \frac{1}{2} = Y$
 $100^\circ = Y$
 $180 - (50 + 67) = \frac{1}{2}Z$
 $63 = \frac{1}{2}Z$
 $126^\circ = Z$
- $B = 180 - 77 = 103^\circ$
 $A = 180 - 84 = 96^\circ$
 $C = 2 \times 77 = 154^\circ$
- $m\widehat{QR} = 2(63^\circ) = 126^\circ$
 $m\angle QCR = m\widehat{QR} = 126^\circ$
- $m\angle AEC = \frac{40^\circ + 30^\circ}{2} = \frac{70^\circ}{2} = 35^\circ$
 $m\angle BED = 35^\circ$
- $m\angle KPL = \frac{116^\circ - 36^\circ}{2} = \frac{80^\circ}{2} = 40^\circ$

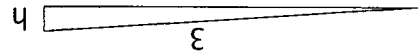
Honors Lesson 29

1.

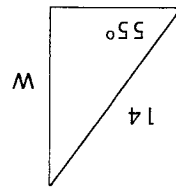
angle	tan
10°	.18
15°	.268
30°	.58
45°	1
60°	1.73



$$\begin{aligned} \sin 34^\circ &= \frac{p}{4.5} \\ .5592 &= \frac{p}{4.5} \\ (4.5) \cdot .5592 &= p \\ p &= 2.5164 \text{ mi or } 13,286.592 \text{ ft} \end{aligned}$$

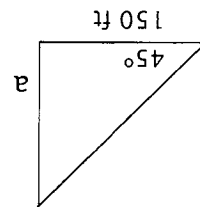


$$\begin{aligned} \sin 4^\circ &= \frac{3}{h} \\ .0698 &= \frac{3}{h} \\ (3) \cdot .0698 &= h \\ h &= .2094 \text{ mi} \\ .2094(5,280) &= 1,105.632 \text{ ft} \end{aligned}$$

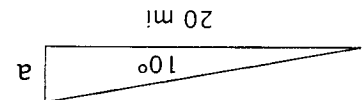


$$\begin{aligned} \sin 55^\circ &= \frac{w}{14} \\ .8192 &= \frac{w}{14} \\ (14) \cdot .8192 &= w \\ w &= 11.4688 \text{ ft} \end{aligned}$$

Honors Lesson 30

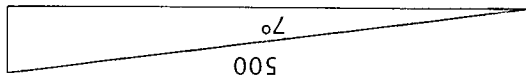
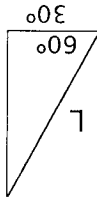


$$\begin{aligned} \tan 45^\circ &= \frac{150}{a} \\ 1 &= \frac{150}{a} \\ 150 \text{ ft} &= a \end{aligned}$$

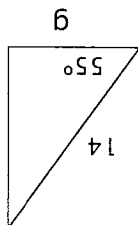


$$\begin{aligned} \tan 10^\circ &= \frac{a}{20} \\ .18 &= \frac{a}{20} \\ a &= .18(20) \\ a &= 3.6 \text{ mi or } 19,008 \text{ ft} \end{aligned}$$

$$\begin{aligned} \cos 60^\circ &= \frac{L}{30} \\ .5 &= \frac{L}{30} \\ .5L &= 30 \\ L &= 60 \text{ ft} \end{aligned}$$



$$\begin{aligned} \cos 7^\circ &= \frac{g}{500} \\ .9925 &= \frac{g}{500} \\ (.9925)(500) &= g \\ g &= 496.25 \text{ ft} \end{aligned}$$



$$\begin{aligned} \cos 55^\circ &= \frac{g}{14} \\ .5736 &= \frac{g}{14} \\ (14) \cdot .5736 &= g \\ g &= 8.0304 \text{ ft} \end{aligned}$$