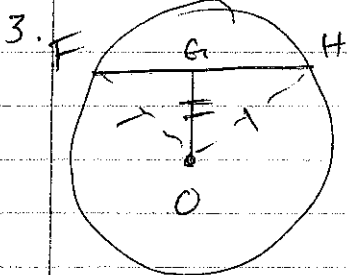
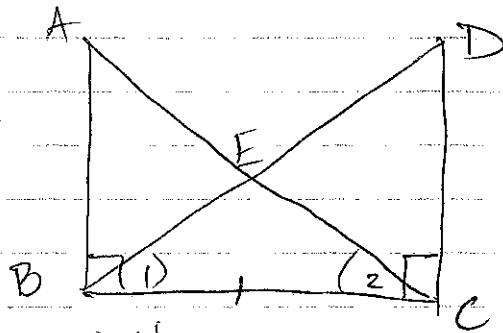
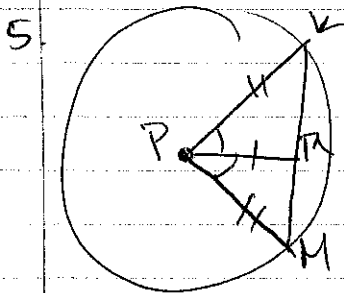


p. 162 # 2, 3, 5, 6, 7

| 2 | S | R |
|---|---------------------------------------|---|
| | ① $\overline{AB} \perp \overline{BC}$ | ① Given |
| | ② $\overline{DC} \perp \overline{BC}$ | ② Given |
| | ③ $\angle 1 \cong \angle 2$ | ③ Given |
| | ④ $\angle ABC \cong \angle DCB$ | ④ \perp lines form $\cong 90^\circ \angle$'s |
| | ⑤ $\overline{BC} \cong \overline{BC}$ | ⑤ Reflexive Prop. |
| | ⑥ $\triangle ABC \cong \triangle DCB$ | ⑥ SAS |
| | ⑦ $\overline{AC} \cong \overline{DB}$ | ⑦ CPCTC |

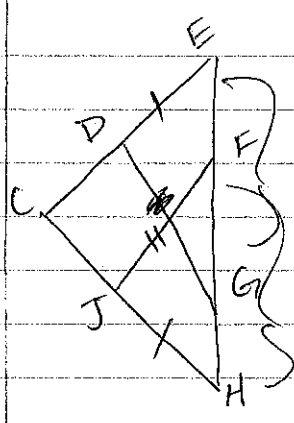


| 3 | S | R |
|---|--|---|
| | ① O | ① Given |
| | ② $\overline{OG} \perp \overline{FH}$ | ② Given |
| | ③ Draw \overline{OH} + \overline{OF} | ③ 2 pts form a line |
| | ④ $\overline{OF} \cong \overline{OH}$ | ④ all radii are \cong |
| | ⑤ $\overline{OG} \cong \overline{OG}$ | ⑤ Reflexive Prop. |
| | ⑥ $\angle FGO \cong \angle HGO$ | ⑥ \perp lines form $\cong 90^\circ \angle$'s |
| | ⑦ $\triangle FOG \cong \triangle HOG$ | ⑦ HL |
| | ⑧ $\overline{FG} \cong \overline{HG}$ | ⑧ CPCTC |



| 5 | S | R |
|---|---------------------------------------|--|
| | ① O | ① Given |
| | ② \overline{PR} bis $\angle KPM$ | ② Given |
| | ③ $\angle KPR \cong \angle MPR$ | ③ Def of Bis |
| | ④ $\overline{PR} \cong \overline{PR}$ | ④ Reflexive |
| | ⑤ $\overline{KP} \cong \overline{MP}$ | ⑤ All radii \cong |
| | ⑥ $\triangle KPR \cong \triangle MPR$ | ⑥ SAS |
| | ⑦ $\overline{KR} \cong \overline{MR}$ | ⑦ CPCTC |
| | ⑧ \overline{PR} is a median | ⑧ Median cuts a segment into 2 \cong segs. |

6.

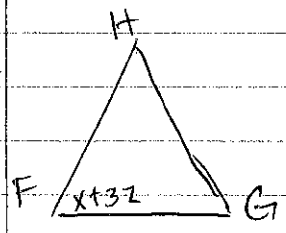


- ① $\overline{DG} \cong \overline{JF}$
- ② $\overline{DE} \cong \overline{JH}$
- ③ $\overline{EG} \cong \overline{HF}$
- ④ $\triangle DGE \cong \triangle JFH$
- ⑤ $\angle H \cong \angle E$
- ⑥ $\triangle CHE$ is isosc

S | R

- ① Given
- ② Given
- ③ Given
- ④ SSS
- ⑤ CPCTC
- ⑥ Isosc \triangle 's have at least $2 \cong \angle$'s

7.



a. $x + 32 = 2x + 4$
 $28 = x$ $60^\circ = \angle H + \angle F + \angle G$

b. $3(3y - 7) = ky + 24$
 $9y - 21 = ky + 24$
 $3y = 45$
 $y = 15$

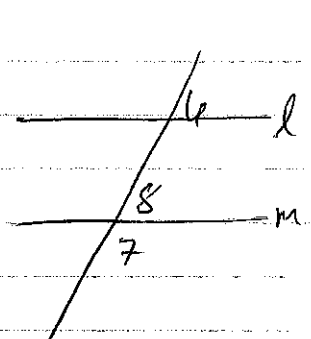
\rightarrow $HG = 3(15) - 7$
 $HG = 38$
 perimeter = $38(3) = 114$

P. 165 # 5, 6, 11, 15, 22a

5. $x + x + 8 = 180$
 $2x = 172$
 $x = 86$
 $180 - 86 = 94^\circ$

6. $2r + 7 + k = 3r - 1$
 $2r + 13 = 3r - 1$
 $14 = r \rightarrow AC = 2(14) + 7 + 6 = 41$

11.



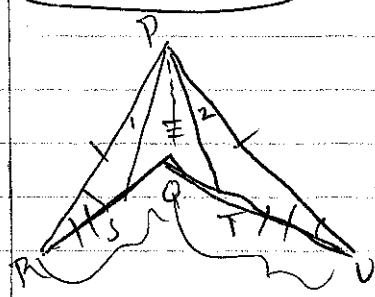
- ① $\angle 6$ supp to $\angle 7$
- ② $l \parallel m$
- ③ $\angle 6 \cong \angle 8$

| S | R |
|---|--|
| | ① Given |
| | ② If same side ext \angle 's are supp then the lines are \parallel |
| | ③ corresponding \angle 's \cong |

15 $6x + 5x + 4x = 180$
 $15x = 180$
 $x = 12 \rightarrow 72^\circ / 60^\circ / 48^\circ$

22a. $R'(-2, 8)$ $P(-5, 1)$ $Q(-2, 1)$

p. 174 #12



- ① $\overline{PR} \cong \overline{PU}$
- ② $\overline{RQ} \cong \overline{QU}$
- ③ $\overline{RS} \cong \overline{UT}$
- ④ Draw \overline{PQ}
- ⑤ $\overline{PQ} \cong \overline{PQ}$
- ⑥ $\triangle PRQ \cong \triangle PQU$
- ⑦ $\angle R \cong \angle U$
- ⑧ $\triangle PRS \cong \triangle PUT$
- ⑨ $\angle 1 \cong \angle 2$

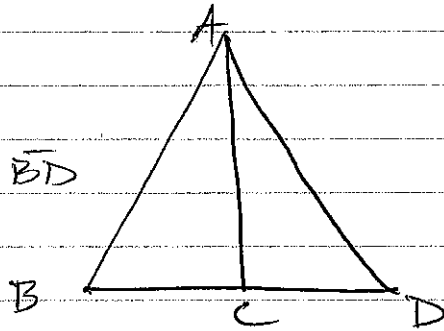
| S | R |
|---|---------------------|
| | ① Given |
| | ② Given |
| | ③ Given |
| | ④ 2 pts form a line |
| | ⑤ Reflexive Prop. |
| | ⑥ SSS |
| | ⑦ CPCTC |
| | ⑧ SAS |
| | ⑨ CPCTC |

p. 182 #2

2. Given: \overline{AC} bis $\angle A$
 $\triangle ABD$ is isosc. w/ base \overline{BD}

Prove:

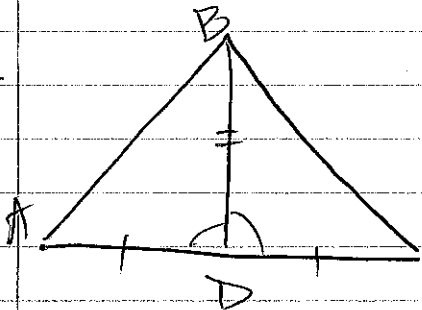
$$\overline{AC} \perp \overline{BD}$$



p. 206 #2, 3, 6, 13

2. a. $\angle ABE + \angle BCD$
 b. $\angle EBD + \angle BDC$

3.



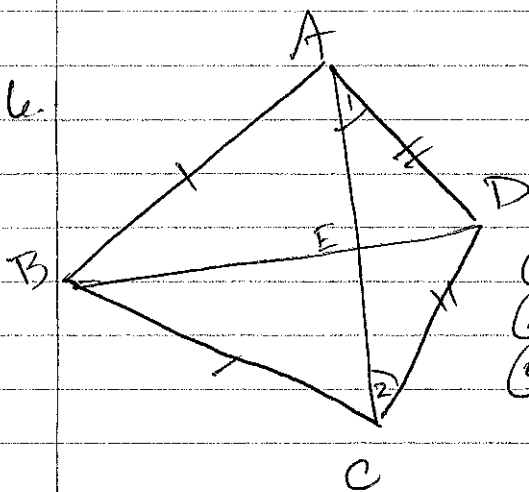
- ① $\angle ADB \cong \angle CDB$
 ② $\overline{AD} \cong \overline{DB}$
 ③ $\overline{BD} \cong \overline{BD}$
 ④ $\angle ADB$ supp to $\angle CDB$

- ⑤ $\angle ADB + \angle CDB$ are 90°
 ⑥ \overline{BD} is an altitude

S | R

- ① Given
 ② Given
 ③ Reflexive Prop.
 ④ Sum to 180°
 ⑤ If 2 \angle 's are supp + \cong , they are rt.
 ⑥ forms rt \angle 's

6.

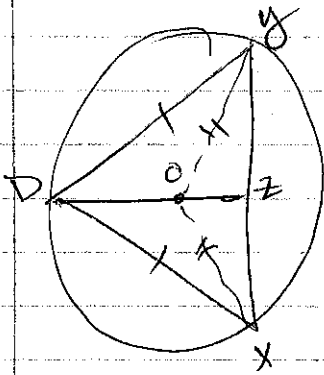


- ① $\triangle ABC$ is isosc
 ② $\angle 1 \cong \angle 2$
 ③ $\overline{AB} \cong \overline{CB}$
 ④ $\overline{AD} \cong \overline{CD}$
 ⑤ $\overline{BD} \perp \overline{AC}$

S | R

- ① Given
 ② Given
 ③ Ded of isosc.
 ④ If \triangle then \triangle
 ⑤ If 2 pts (D + B) are equidistant from the endpoints of a seg, then they determine the \perp bis.

13.



- ① $\odot O$
- ② $\overline{DX} \cong \overline{DY}$
- ③ Draw $\overline{OX} + \overline{OY}$
- ④ $\overline{OX} \cong \overline{OY}$
- ⑤ \overline{DZ} bis \overline{XY}

| S | R |
|---|---|
| | ① Given |
| | ② Given |
| | ③ 2 pts form a line |
| | ④ all radii \cong |
| | ⑤ If 2 pts are equidistant from the endpoints of a seg, then they determine the \perp bisector. |