## Lesson 4.4

Homework Answers
Pg 204 - #1-4, 7-13, 15, 19, 21, 28-36
Pg 209 - #1-9

## Pg 204

- 1)  $\angle PSQ \cong \angle SPR$ ;  $\overline{SQ} \cong \overline{RP}$ ;  $\overline{PQ} \cong \overline{SR}$
- 2) AAS;  $\triangle ABC \cong \triangle EBD$ ;  $\angle A \cong \angle E$ ;  $\overline{CB} \cong \overline{DB}$ ;  $\overline{DE} \cong \overline{CA}$  by CPCTC
- 3) SAS;  $\triangle KLJ \cong \triangle OMN$ ;  $\angle K \cong \angle O$ ;  $\angle J \cong \angle N$ ;  $\overline{KJ} \cong \overline{ON}$  by CPCTC
- 4) SSS;  $\triangle HUG \cong \triangle BUG$ ;  $\angle H \cong \angle B$ ;  $\angle HUG \cong \angle BUG$ ;  $\angle UGH \cong \angle UGB$  by CPCTC
- 7)  $\triangle ABD \cong \triangle CBD$  by ASA:  $\overline{BD} \cong \overline{BD}$  by Reflexive POC;  $\overline{AB} \cong \overline{CB}$  by CPCTC
- 8)  $\triangle MOE \cong \triangle REO$  by SSS:  $\overline{OE} \cong \overline{OE}$  by Reflexive POC;  $\angle M \cong \angle R$  by CPCTC
- 9)  $\triangle SPT \cong \triangle OPT$  by SAS:  $\overline{TP} \cong \overline{TP}$  by Reflexive POC;  $\angle S \cong \angle O$  by CPCTC
- 10)  $\triangle PNK \cong \triangle MNL$  by SAS:  $\angle KNP \cong \angle LNM$  vert.  $\angle 's$  are  $\cong \overline{KP} \cong \overline{LM}$  by CPCTC
- 11)  $\Delta CYT \cong \Delta RYP$  by AAS:  $\overline{CT} \cong \overline{RP}$  by CPCTC
- 12)  $\triangle ATM \cong \triangle RMT$  by SAS:  $\angle ATM \cong \angle RMT$  alt.int.  $\angle 's$  are  $\cong \angle AMT \cong \angle RTM$  by CPCTC

- 13) Yes;  $\triangle ABD \cong \triangle CBD$  by SSS: so  $\angle A \cong \angle C$  by CPCTC
- 15)  $\overline{KL} \cong \overline{KL}$  by Reflexive POC so the  $\Delta' s$  are  $\cong$  by SAS
- 19) a) Given
  - b)  $\perp$  lines form right  $\angle$ 's
  - c) Right  $\angle$ 's are  $\cong$
  - d) Given
  - e) Defn. of segment bisector
  - f) Reflexive POC
  - g) SAS
  - h) CPCTC
- 21) Prove  $\triangle ABE \cong \triangle CDF$  by SAS since  $\overline{AE} \cong \overline{FC}$  by subtraction.
- 28) C
- 29) C
- 30) D
- 31) B
- 32) C
- 33) a)  $\triangle KBV \cong \triangle KBT$ ; yes; SAS b) CPCTC
- 34) ASA
- 35) AAS
- 36) x = 10 + (180 x) x = 9595 and 85

## Lesson 4.4

Homework Answers

Pg 204 - #1-4, 7-13, 15, 19, 21, 28-36

Pg 209 - #1-9

Pg 209

- 1) (-3, -7)
- 2) (5, 2)
- 3) no solution
- 4)  $\left(\frac{3}{4}, -\frac{9}{2}\right)$
- 5) infinitely many solutions
- 6) no solution
- 7) infinitely many solutions
- 8) (8, 17)
- $9)\left(\frac{3}{2}, -\frac{1}{2}\right)$