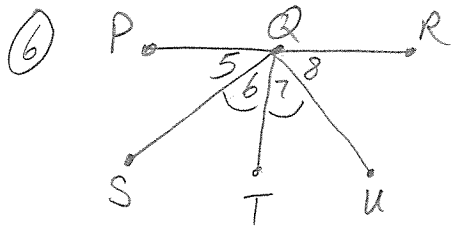
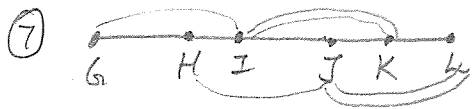


More Proofs Practice - Chap 2 Test Answer KEY



$$\begin{aligned} \textcircled{1} \overline{TQ} \perp \overline{PR} &\rightarrow \textcircled{2} \begin{array}{l} \sphericalangle 5 \text{ complements } \sphericalangle 6 \\ \sphericalangle 8 \text{ complements } \sphericalangle 7 \end{array} \\ \textcircled{3} \overline{QT} \text{ bisects } \sphericalangle SQU &\rightarrow \textcircled{4} \sphericalangle 6 \cong \sphericalangle 7 \end{aligned} \left. \vphantom{\begin{array}{l} \textcircled{1} \\ \textcircled{3} \end{array}} \right\} \rightarrow \textcircled{5} \sphericalangle 5 \cong \sphericalangle 8$$

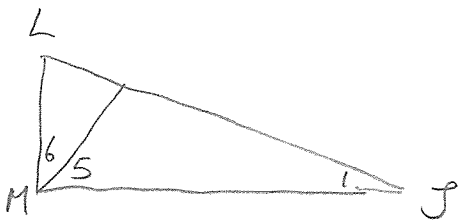
- ① Given
- ② Exterior sides \rightarrow acute adj. \sphericalangle s \rightarrow complementary \sphericalangle s.
- ③ Given
- ④ Def. of angle bisector
- ⑤ Congruent complements thm



$$\begin{aligned} \textcircled{1} \overline{GI} \cong \overline{HJ} &\rightarrow \textcircled{2} \begin{array}{l} \overline{GH} \cong \overline{IJ} \\ \overline{IK} \cong \overline{JL} \end{array} \left. \vphantom{\textcircled{1}} \right\} \rightarrow \textcircled{3} \overline{GH} \cong \overline{KL} \end{aligned}$$

- ① Given
- ② Common segments thm
- ③ Transitive Property

8



- ① $\triangle LMJ$ is right. \rightarrow ② $m\angle LMJ = 90$
 ③ $\angle 5$ complem. $\angle 1 \rightarrow$ ④ $m\angle 5 + m\angle 1 = 90$
- } \rightarrow ⑤ $m\angle 5 + m\angle 1 = m\angle LMJ$
 } ⑥ $m\angle 5 + m\angle 6 = m\angle LMJ$
- ⑦ $m\angle 5 + m\angle 1 = m\angle 5 + m\angle 6 \rightarrow$ ⑧ $m\angle 1 = m\angle 6 \rightarrow$ ⑨ $\angle 1 \cong \angle 6$

- ① Given ⑤ Substitution ⑨ Def \cong \angle s
 ② Def right \triangle ⑥ Angle Add Post.
 ③ Given ⑦ Substitution
 ④ Def complement. \angle s. ⑧ Subtraction

- ⑩ ① \overline{EF} bisects $\angle AXB \rightarrow$ ② $\angle 1 \cong \angle 2$
 ③ $\angle 1 \cong \angle 4$
- } \rightarrow ④ $\angle 2 \cong \angle 4$
 } ⑤ $\angle 2 \cong \angle 3$
- } \rightarrow ⑥ $\angle 3 \cong \angle 4$
 } \rightarrow ⑦ \overline{EF} bisects $\angle CXD$.

- ① Given
 ② Def of \angle bisector
 ③ Vertical \angle s \cong .
 ④ Transitive
 ⑤ Vertical \angle s \cong
 ⑥ Transitive
 ⑦ Def of \angle bisector.