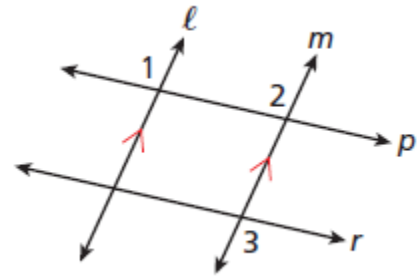
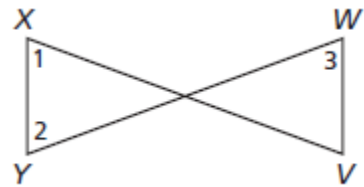


## Geometry – Chapter 3 Proof Practice

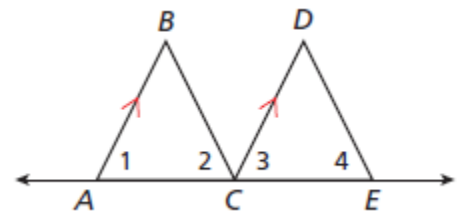
- 1 Given:  $\ell \parallel m$ ,  $\angle 1 \cong \angle 3$   
 Prove:  $r \parallel p$



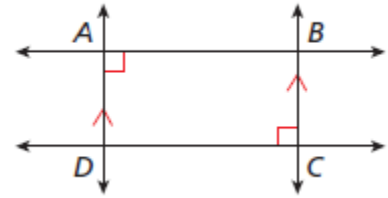
- 2 Given:  $\angle 1 \cong \angle 2$ ,  $\angle 3 \cong \angle 1$   
 Prove:  $XY \parallel WV$



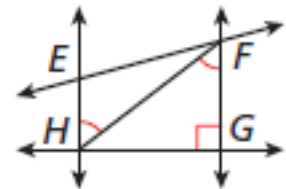
- 3 Given:  $\overline{AB} \parallel \overline{CD}$ ,  $\angle 1 \cong \angle 2$ ,  $\angle 3 \cong \angle 4$   
 Prove:  $\overline{BC} \parallel \overline{DE}$



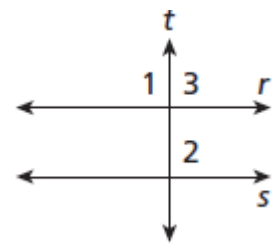
- 4 **Given:**  $\overleftrightarrow{AD} \parallel \overleftrightarrow{BC}$ ,  $\overleftrightarrow{AD} \perp \overleftrightarrow{AB}$ ,  $\overleftrightarrow{BC} \perp \overleftrightarrow{DC}$   
**Prove:**  $\overleftrightarrow{AB} \parallel \overleftrightarrow{DC}$



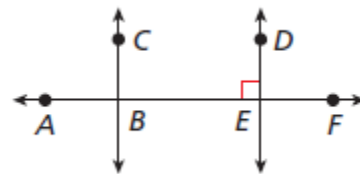
- 5 **Given:**  $\angle EHF \cong \angle HFG$ ,  $\overleftrightarrow{FG} \perp \overleftrightarrow{GH}$   
**Prove:**  $\overleftrightarrow{EH} \perp \overleftrightarrow{GH}$



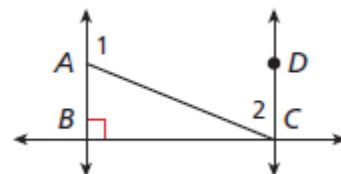
- 6 **Given:**  $r \parallel s$ ,  $\angle 1 \cong \angle 2$   
**Prove:**  $r \perp t$



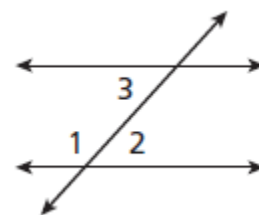
- 7 Given:  $\angle ABC \cong \angle CBE$ ,  $\overleftrightarrow{DE} \perp \overleftrightarrow{AF}$   
 Prove:  $\overleftrightarrow{CB} \parallel \overleftrightarrow{DE}$



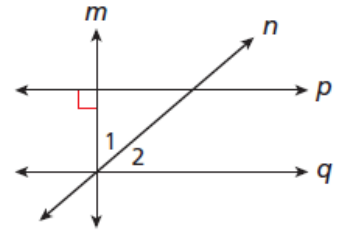
- 8 Given:  $\overleftrightarrow{AB} \perp \overleftrightarrow{BC}$ ,  $m\angle 1 + m\angle 2 = 180^\circ$   
 Prove:  $\overleftrightarrow{BC} \perp \overleftrightarrow{CD}$



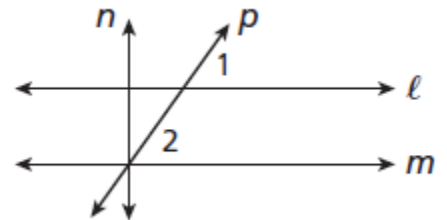
- Given:  $\angle 1$  is supplementary to  $\angle 3$ .  
 9 Prove:  $\angle 2 \cong \angle 3$



- 10 Given:  $m \perp p$ ,  $\angle 1$  and  $\angle 2$  are complementary.  
 Prove:  $p \parallel q$



- 11 Given:  $\angle 1 \cong \angle 2$ ,  $n \perp \ell$   
 Prove:  $n \perp m$



- 12 Given:  $\angle 1 \cong \angle 2$ ,  $\ell \perp n$   
 Prove:  $\ell \perp p$

