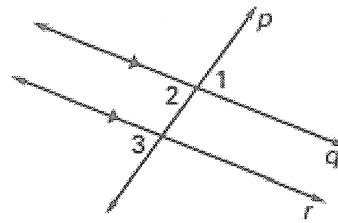


Honor's Geometry  
3.2-3.3 EXTRA Proof Practice

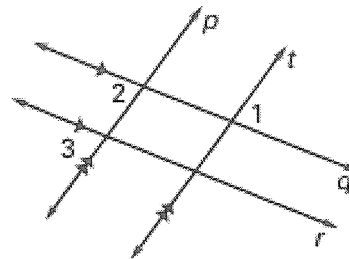
Name: Key  
Date: \_\_\_\_\_

Complete each two-column proof.



1. Given:  $q \parallel r$   
Prove:  $\angle 1 \cong \angle 3$

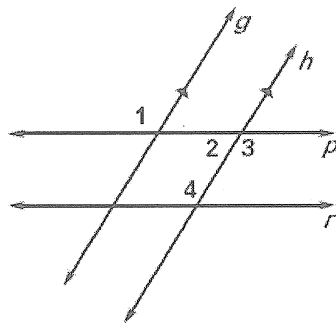
Statements	Reasons
1. $q \parallel r$	1. Given
2. $\angle 1 \cong \angle 2$	2. Vert $\angle$ 's $\cong$ Theorem
3. $\angle 2 \cong \angle 3$	3. Corr $\angle$ 's Post.
4. $\angle 1 \cong \angle 3$	4. Transitive Prop.



2. Given:  $q \parallel r$ ,  $p \parallel t$   
Prove:  $\angle 1 \cong \angle 3$

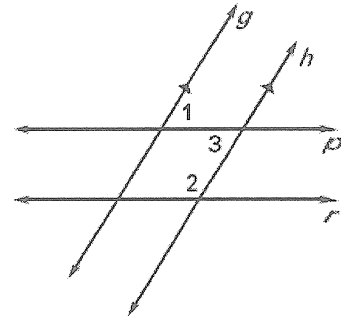
Statements	Reasons
1. $p \parallel t$	1. Given
2. $\angle 1 \cong \angle 2$	2. Alt Ext $\angle$ 's Thm
3. $q \parallel r$	3. Given
4. $\angle 2 \cong \angle 3$	4. Corr $\angle$ 's Post
5. $\angle 1 \cong \angle 3$	5. Transitive Prop

3. Given:  $g \parallel h, m\angle 1 = 122^\circ, m\angle 4 = 122^\circ$   
 Prove:  $p \parallel r$



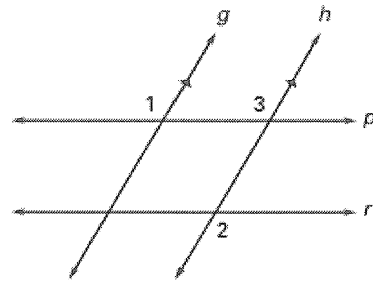
Statements	Reasons
1. $g \parallel h, m\angle 1 = 122^\circ$	1. Given
2. $\angle 1 \cong \angle 3$	2. Alt Ext $\angle$ 's Thm
3. $m\angle 1 = m\angle 3$	3. Def of $\cong \angle$ 's
4. $m\angle 3 = 122^\circ$	4. Substitution
5. $m\angle 4 = 122^\circ$	5. Given
6. $m\angle 3 = m\angle 4$	6. Substitution
7. $\angle 3 \cong \angle 4$	7. Def of $\cong \angle$ 's
8. $p \parallel r$	8. Alt Int $\angle$ 's Converse

4. Given:  $g \parallel h$ ,  $\angle 1$  and  $\angle 2$  are supplementary  
 Prove:  $p \parallel r$



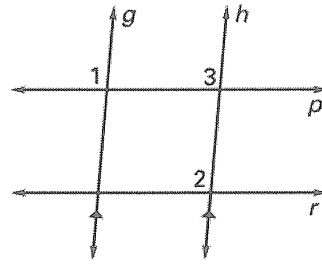
Statements	Reasons
1. $g \parallel h$ , $\angle 1$ and $\angle 2$ are supplementary	1. Given
2. $\angle 1 \cong \angle 3$	2. Alt Int $\angle$ 's Thm
3. $m\angle 1 = m\angle 3$	3. Def of $\cong \angle$ 's
4. $m\angle 1 + m\angle 2 = 180^\circ$	4. Def of Supp. $\angle$ 's
5. $m\angle 3 + m\angle 2 = 180^\circ$	5. Substitution
6. $p \parallel r$	6. Consec. Int $\angle$ 's Conv.

5. Given:  $g \parallel h$ ,  $\angle 1 \cong \angle 2$   
 Prove:  $p \parallel r$



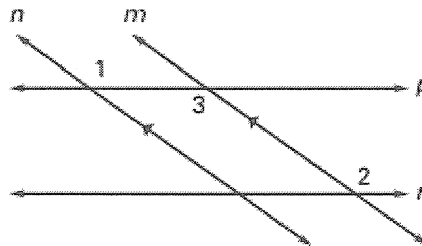
Statements	Reasons
1. $g \parallel h$	1. Given
2. $\angle 1 \cong \angle 3$	2. Corr $\angle$ 's Post
3. $\angle 1 \cong \angle 2$	3. Given
4. $\angle 2 \cong \angle 3$	4. Transitive Prop.
5. $p \parallel r$	5. Alt Ext $\angle$ 's Conv.

6. Given:  $g \parallel h, \angle 1 \cong \angle 2$   
 Prove:  $p \parallel r$



Statements	Reasons
1. $g \parallel h, \angle 1 \cong \angle 2$	1. Given
2. $\angle 1 \cong \angle 3$	2. Corr $\angle$ 's Post
3. $\angle 2 \cong \angle 3$	3. Transitive Prop.
4. $p \parallel r$	4. Corr $\angle$ 's Conv.
5.	5.

7. Given:  $n \parallel m, \angle 1 \cong \angle 2$   
 Prove:  $p \parallel r$



Statements	Reasons
1. $n \parallel m, \angle 1 \cong \angle 2$	1. Given
2. $\angle 1 \cong \angle 3$	2. Alt Int $\angle$ 's Thm
3. $\angle 2 \cong \angle 3$	3. Transitive Prop.
4. $p \parallel r$	4. Alt Int $\angle$ 's Conv.
5.	5.