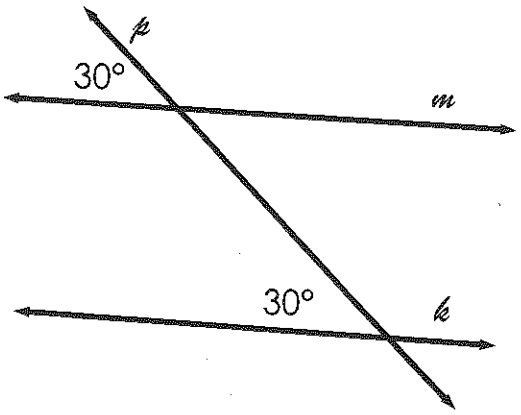
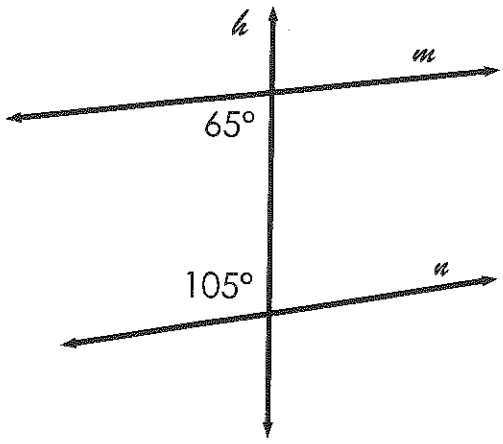
Independent Practice



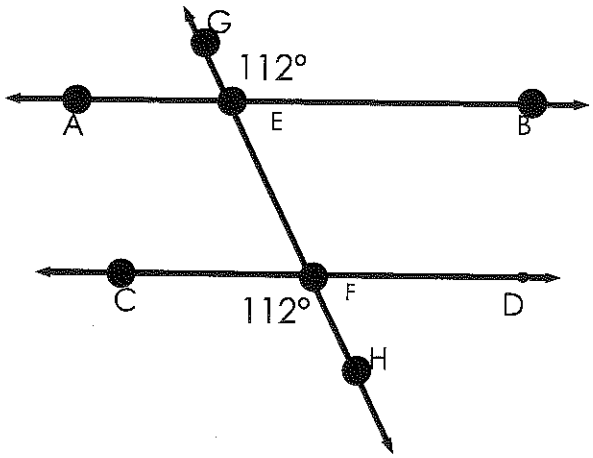
Prove $k \parallel m$

Since m and line k are ∥ b/c corresponding angles are ≅.



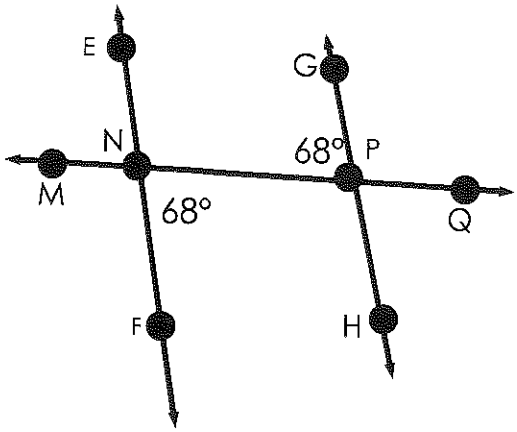
Prove $n \parallel m$

Line n is NOT parallel to line m because same side interior are NOT Supplementary



Prove $\overline{AB} \parallel \overline{CD}$

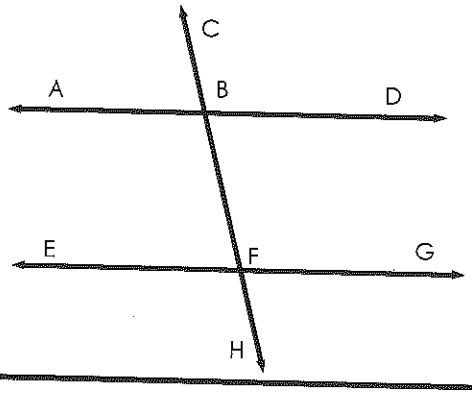
AB ∥ CD b/c ∠GEB and ∠CFH are Alt Ext ∠'s and they are ≅.



Prove $\overline{EF} \parallel \overline{GH}$

EF ∥ GH b/c ∠FNP and ∠GPN are Alt. int. ∠'s and they are ≅.

$\overline{CH}$ is the transversal for line $\overline{AD}$ and $\overline{EG}$.



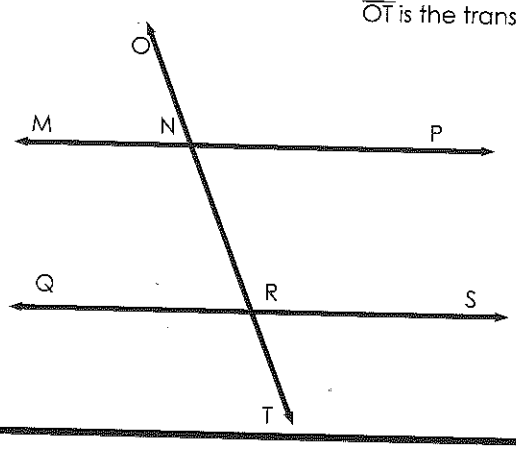
Which statement would prove $\overline{AB} \parallel \overline{EG}$?

1. $\angle ABC \cong \angle FBD$
2. $\angle ABC \cong \angle CBD$
3. $\angle ABC \cong \angle HFG$

Explain your answer.

Alt Ext. $\angle$'s $\cong$

$\overline{OT}$ is the transversal for line $\overline{MP}$ and $\overline{QS}$.



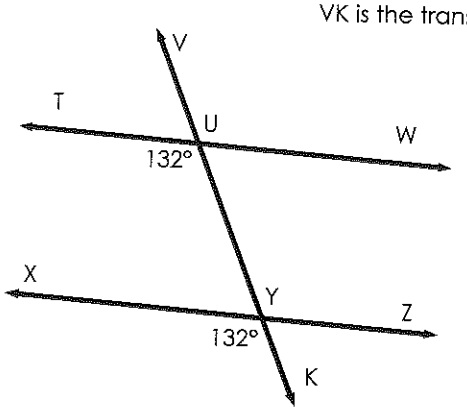
Which statement would prove $\overline{MP} \parallel \overline{QS}$?

1. $\angle MNT \cong \angle QRN$
2. $\angle ONP \cong \angle NRQ$
3. $\angle ONM \cong \angle QRO$

Explain your answer.

Corr $\angle$'s are $\cong$

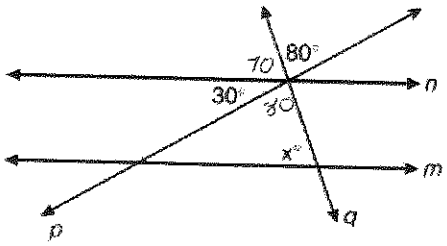
$\overline{VK}$ is the transversal for line $\overline{TW}$ and $\overline{XZ}$.



Prove $\overline{TW} \parallel \overline{XZ}$

TW || XZ b/c $\angle TUY$ and $\angle XYK$ are Corresponding $\angle$s and they are $\cong$

In the diagram below, lines *n* and *m* are cut by transversals *p* and *q*.



What value of *x* would make lines *n* and *m* parallel?

$x = 70$

Explain your answer

$x = 70$ b/c . . . .