

Practice and Apply

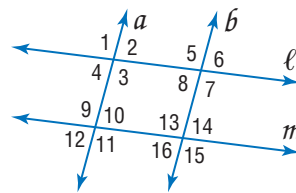
Homework Help

For Exercises	See Examples
13–24	1
26–31	2
25, 32–37	3
38–39	4

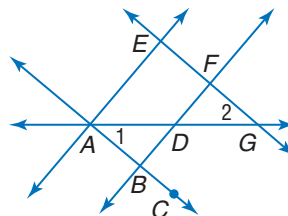
Extra Practice
See page 760.

Given the following information, determine which lines, if any, are parallel. State the postulate or theorem that justifies your answer.

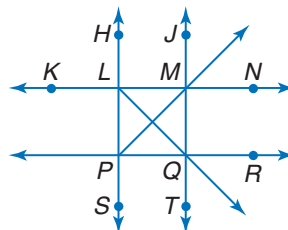
- $\angle 2 \cong \angle 8$
- $\angle 9 \cong \angle 16$
- $\angle 2 \cong \angle 10$
- $\angle 6 \cong \angle 15$



- $\angle AEF \cong \angle BFG$
- $\angle EAB \cong \angle DBC$
- $\angle EFB \cong \angle CBF$
- $m\angle GFD + m\angle CBD = 180$



- $\angle HLK \cong \angle JML$
- $\angle PLQ \cong \angle MQL$
- $m\angle MLP + \angle RPL = 180$
- $\overline{HS} \perp \overline{PR}, \overline{JT} \perp \overline{PR}$



- PROOF** Copy and complete the proof of Theorem 3.8.

Given: $\ell \perp t$
 $m \perp t$

Prove: $\ell \parallel m$

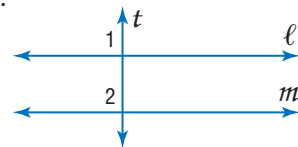
Proof:

Statements

- $\ell \perp t, m \perp t$
- $\angle 1$ and $\angle 2$ are right angles.
- $\angle 1 \cong \angle 2$
- $\ell \parallel m$

Reasons

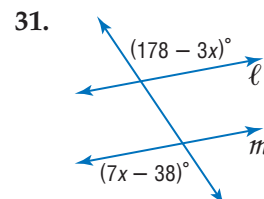
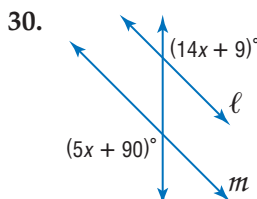
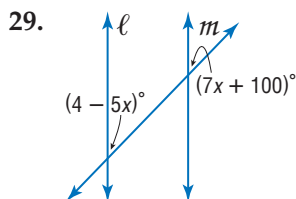
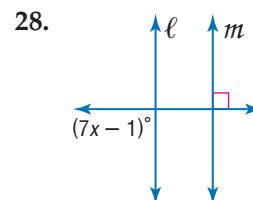
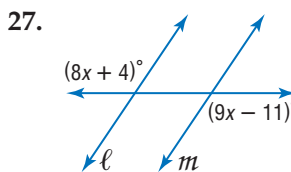
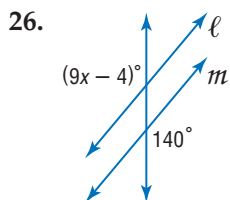
- ?
- ?
- ?
- ?



WebQuest

Latitude lines are parallel, and longitude lines appear parallel in certain locations on Earth. Visit www.geometryonline.com/webquest to continue work on your WebQuest project.

Find x so that $\ell \parallel m$.



- PROOF** Write a two-column proof of Theorem 3.6.
- PROOF** Write a paragraph proof of Theorem 3.7.