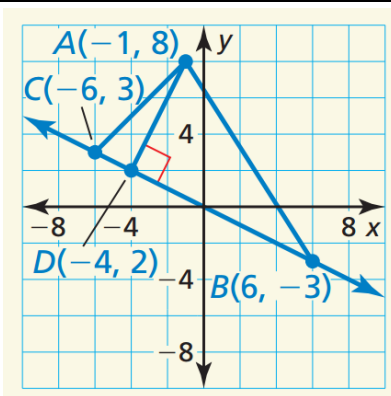


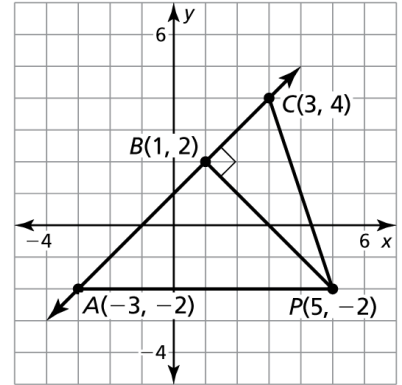
Lesson 3.4

Name \_\_\_\_\_

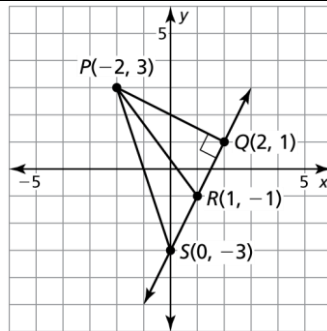
1. Find the distance from point  $P$  to  $\overline{AB}$ .



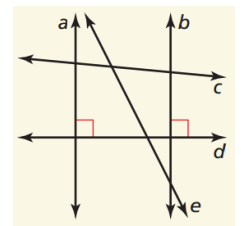
2. Find the distance from point  $P$  to  $\overline{AB}$ .



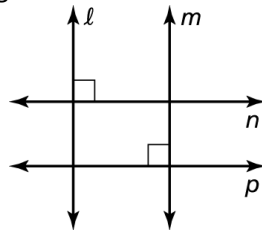
3. Find the distance from point  $P$  to  $\overline{QS}$ .



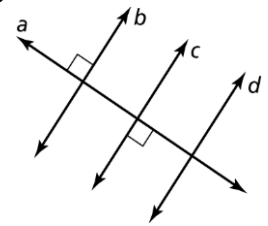
4. Determine which lines, if any, must be parallel in the diagram. Explain your reasoning.



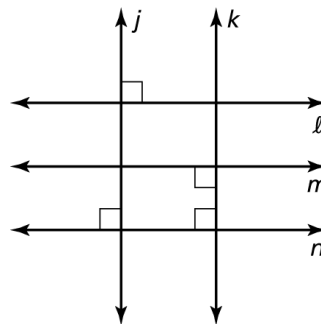
5. Determine which lines, if any, must be parallel in the diagram. Explain your reasoning.



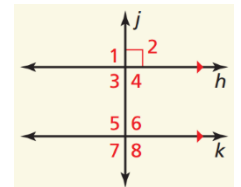
6. Determine which lines, if any, must be parallel in the diagram. Explain your reasoning.



7. Determine which lines, if any, must be parallel. Explain your reasoning.

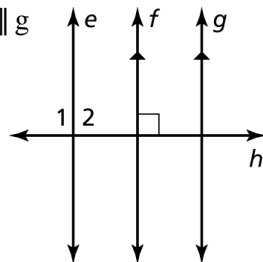


8. Prove the Perpendicular Transversal Theorem using the diagram and the Alternate Interior Angles Theorem.



9. **Given:**  $\angle 1 \cong \angle 2$ ,  $f \perp h$  and  $f \parallel g$

**Prove:**  $e \parallel g$



10. **Given:**  $\angle 1 \cong \angle 2$ ,  $c \parallel d$

$b \perp d$   
**Prove:**  $a \parallel b$

