

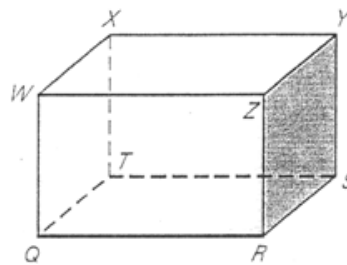
Name \_\_\_\_\_

Date \_\_\_\_\_

**LESSON 3.1 Practice**  
For use with pages 146–152

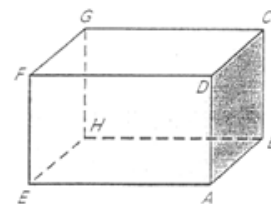
Think of each segment in the diagram as part of a line. Complete the statement with *parallel*, *skew*, or *perpendicular*.

- $\overline{WZ}$  and  $\overline{ZR}$  are ?
- $\overline{WZ}$  and  $\overline{ST}$  are ?
- $\overline{QT}$  and  $\overline{YS}$  are ?
- Plane  $WZR$  and plane  $SYZ$  are ?
- Plane  $ROT$  and plane  $YXW$  are ?



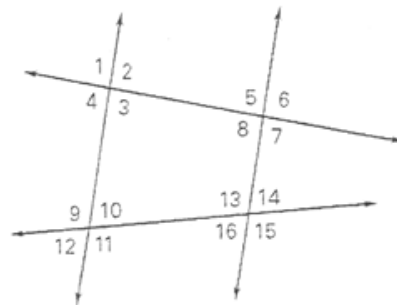
Think of each segment in the diagram as part of a line. Which line(s) or plane(s) appear to fit the description?

- Line(s) parallel to  $\overline{EH}$  1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_
- Line(s) perpendicular to  $\overline{EH}$  1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_
- Line(s) skew to  $\overline{CD}$  and containing point  $F$
- Plane(s) perpendicular to plane  $AEH$
- Plane(s) parallel to plane  $FGC$



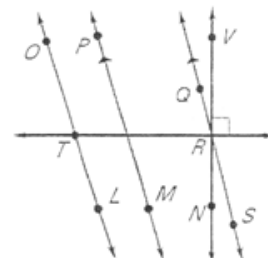
Classify the angle pair as *corresponding*, *alternate interior*, *alternate exterior*, or *consecutive interior* angles.

- $\angle 1$  and  $\angle 9$
- $\angle 8$  and  $\angle 13$
- $\angle 6$  and  $\angle 16$
- $\angle 4$  and  $\angle 10$
- $\angle 8$  and  $\angle 16$
- $\angle 10$  and  $\angle 13$



In Exercises 17–20, use the markings in the diagram.

- Name a pair of parallel lines.
- Name a pair of perpendicular lines.
- Is  $\overline{OL} \parallel \overline{TR}$ ? Explain.
- Is  $\overline{OL} \perp \overline{TR}$ ? Explain.



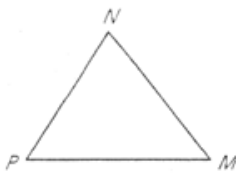
Complete the statement with: *always, sometimes, or never.*

- 21. If two lines are parallel, then they   ? intersect.
- 22. If one line is skew to another, then they are   ? coplanar.
- 23. If two lines intersect, then they are   ? perpendicular.
- 24. If two lines are coplanar, then they are   ? parallel.

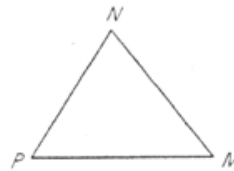
For #25-28, Use a straightedge!

CORRECTLY MARK THE FINAL DRAWING SHOWING PARALLEL LINE MARKINGS OR PERPENDICULAR MARKINGS. (right angles)

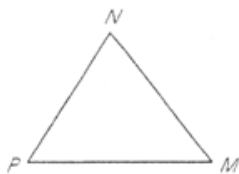
25. Draw a line through M and parallel to  $\overline{NP}$



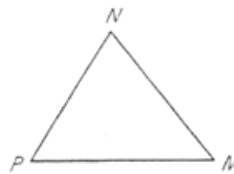
26. Draw a line through N and perpendicular to  $\overline{MP}$



27. Draw a line through M and perpendicular to  $\overline{MP}$

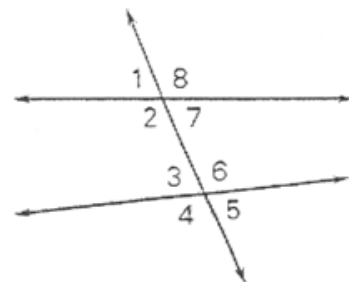


28. Draw a line through P and parallel to  $\overline{MN}$



29. Name all possible pairs of angle types described below using the diagram.

- a. corresponding: \_\_\_\_\_
- b. alternate interior: \_\_\_\_\_
- c. alternate exterior: \_\_\_\_\_
- d. consecutive interior: \_\_\_\_\_



30. Name 3 pair of **vertical angles** using the diagram from #29: \_\_\_\_\_