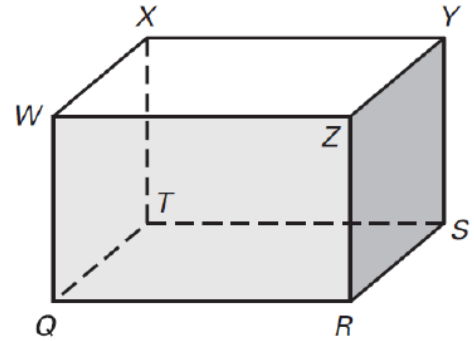# Unit 7.1 Identify pairs of Lines and Angles PRACTICE   Period: _____
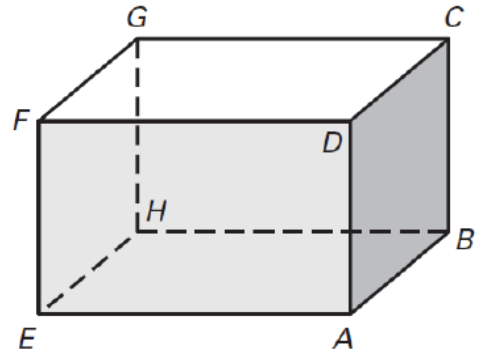
Think of each segment in the diagram as part of a line.
Complete the statement with parallel, skew, or intersect.

1. $\overleftrightarrow{WZ}$ and $\overleftrightarrow{ZR}$ are _____.

2. $\overleftrightarrow{WZ}$ and $\overleftrightarrow{ST}$ are _____.

3. $\overleftrightarrow{QT}$ and $\overleftrightarrow{YS}$ are _____.

4. Plane WZR and plane SYZ are _____.
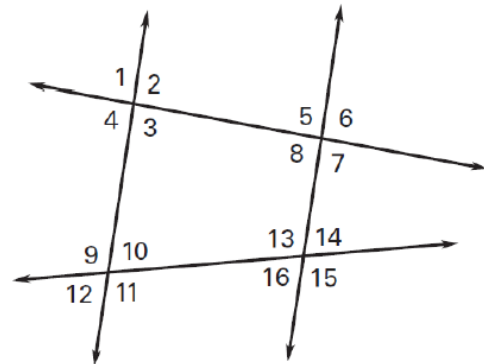
5. Plane RQT and plane YXW are _____.

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

6. Line(s) parallel to $\overleftrightarrow{EH}$ _____, _____, _____.

7. Line(s) perpendicular to $\overleftrightarrow{EH}$ _____, _____, _____, _____.

8. Line(s) skew to $\overleftrightarrow{CD}$ and containing point F _____.

9. Plane(s) perpendicular to plane AEH _____, _____, _____, _____.
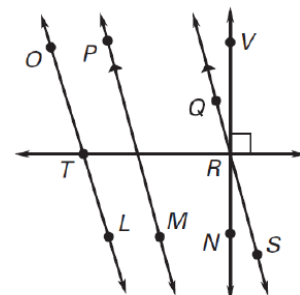
10. Plane(s) parallel to plane FGC _____.

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

11. ∠1 and ∠9   _____.

12. ∠8 and ∠13   _____.

13. ∠6 and ∠16   _____.

14. ∠4 and ∠10   _____.

15. ∠8 and ∠16   _____.

16. ∠10 and ∠13   _____.

Use the figure at the right to answer the following questions.

17. Name a pair of parallel lines.   _____.

18. Name a pair of perpendicular lines.   _____.

19. Is $\overleftrightarrow{OL}$ ∥ $\overleftrightarrow{TR}$? _____. Why?_____

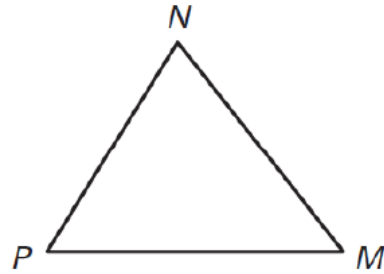20. Is $\overleftrightarrow{OL}$ ⊥ $\overleftrightarrow{TR}$? _____. Why?_____

Fill in the blank with the correct word: sometimes,   always, 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.

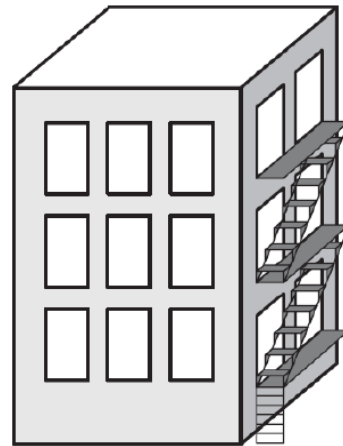24. If two lines are coplanar, then they are _____ parallel.

Add the lines to the figure at the right.

25. Add a line through M and parallel to $\overleftrightarrow{NP}$.

26. Add a line through N and perpendicular to $\overleftrightarrow{MP}$.

27. Add a line through M and perpendicular to $\overleftrightarrow{MP}$.

28. Add a line through P and parallel to $\overleftrightarrow{MN}$.

Use the figure at the right to decide whether each statement is TRUE or FALSE.

29.   The planes containing the platforms outside of each pair
        of windows are parallel to the ground.

30.   The planes containing the stairs are parallel to each other.

31.   The planes containing the platforms outside of each pair
        of windows are perpendicular to the planes containing the stairs.

32.   The planes containing the platforms outside of each pair
        of windows are perpendicular to the plane containing the
        side of the building with the fire escape.

If line g and line h are parallel, then give the degrees of the missing angles.
Corresponding angles that are formed from parallel lines are congruent.

33. $m\angle A =$_____.   34. $m\angle B =$_____.

35. $m\angle C =$_____.   36. $m\angle D =$_____.

37. $m\angle E =$_____.   38. $m\angle F =$_____.

39. $m\angle G =$_____.   40. $m\angle H =$_____.

41. $m\angle I =$_____.   42. $m\angle J =$_____.

43. $m\angle K =$_____.   44. $m\angle L =$_____.

45. $m\angle M =$_____.   46. $m\angle N =$_____.