# Lesson 3.1 Worksheet

Name: _____

Think of each segment in the diagram as part of a line. Which line(s) or plane(s) <u>contain point B</u> and appear to fit the description?

1.) Line(s) parallel to $\overleftrightarrow{CD}$.

2.) Line(s) perpendicular to $\overleftrightarrow{CD}$.

3.) Line(s) skew to $\overleftrightarrow{CD}$.
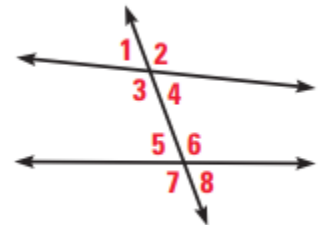
4.) Lines parallel to plane CDH.

For exercises 5-8, use the markings in the diagram to answer the questions below.

5.) Name a pair of parallel lines.

6.) Name a pair of perpendicular lines.

7.) Is $\overleftrightarrow{PN} \parallel \overleftrightarrow{KM}$?

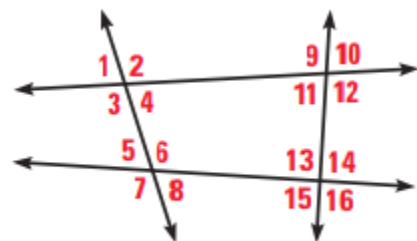8.) Is $\overleftrightarrow{PR} \perp \overleftrightarrow{NP}$?
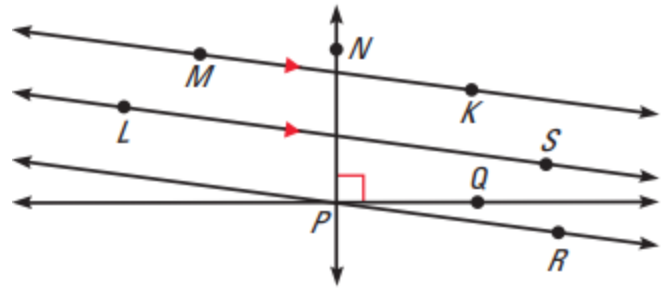
In 9-12, use the diagram to name <u>all</u> pairs of the given angle type.

9.) Corresponding Angles.   10.) Alternate Interior Angles.

11.) Alternate Exterior Angles.   12.) Consecutive Angles.

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

13.) $\angle 5\ and\ \angle 1$ 14.) $\angle 5\ and\ \angle 1$

15.) $\angle 5\ and\ \angle 1$ 16.) $\angle 5\ and\ \angle 1$

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

17.) If two lines are parallel, then they are _____ coplanar.

18.) If two lines are not coplanar, then they _____ intersect.

19.) If three lines intersect at one point, then they are _____ coplanar.

CONSTRUCTION: Use the picture of the cherry-picker to answer 20 and 21.

20.) Is the work platform *perpendicular, parallel,* or *skew* to the ground?

21.) Is the arm *perpendicular, parallel,* or *skew* to the ground?