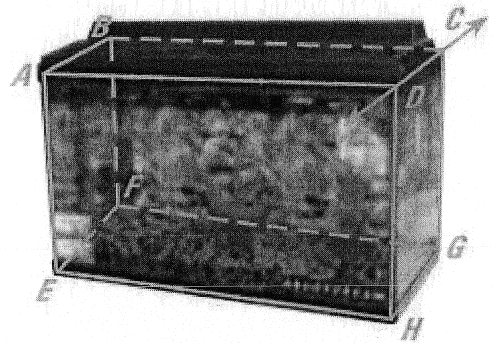


Lesson 3.1 Worksheet

Name: Key

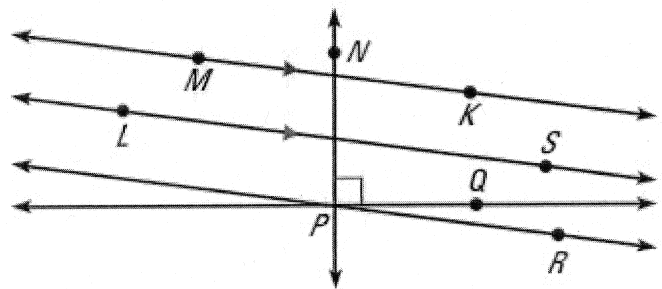
Think of each segment in the diagram as part of a line. Which line(s) or plane(s) contain point B and appear to fit the description?

- 1.) Line(s) parallel to \overleftrightarrow{CD} . \overleftrightarrow{BA}
- 2.) Line(s) perpendicular to \overleftrightarrow{CD} . \overleftrightarrow{BC}
- 3.) Line(s) skew to \overleftrightarrow{CD} . \overleftrightarrow{BF}
- 4.) Lines parallel to plane CDH. Plane BAF



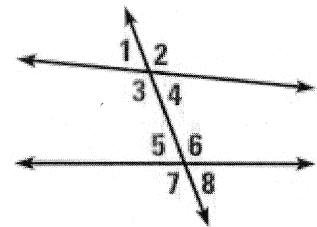
For exercises 5-8, use the markings in the diagram to answer the questions below.

- 5.) Name a pair of parallel lines. $\overleftrightarrow{MK} \parallel \overleftrightarrow{LS}$
- 6.) Name a pair of perpendicular lines. $\overleftrightarrow{NP} \perp \overleftrightarrow{PQ}$
- 7.) Is $\overleftrightarrow{PN} \parallel \overleftrightarrow{KM}$? *No*
- 8.) Is $\overleftrightarrow{PR} \perp \overleftrightarrow{NP}$? *No*



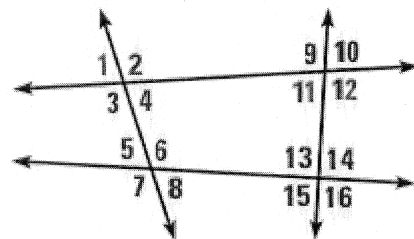
In 9-12, use the diagram to name all pairs of the given angle type.

- | | |
|---|---|
| 9.) Corresponding Angles.
$\angle 1 + \angle 5, \angle 2 + \angle 6$
$\angle 3 + \angle 7, \angle 4 + \angle 8$ | 10.) Alternate Interior Angles.
$\angle 3 + \angle 6$
$\angle 4 + \angle 5$ |
| 11.) Alternate Exterior Angles.
$\angle 1 + \angle 8$
$\angle 2 + \angle 7$ | 12.) Consecutive Interior Angles.
$\angle 3 + \angle 5$
$\angle 4 + \angle 6$ |



Classify the listed angle pair as corresponding, alternate interior, alternate exterior, consecutive angles, or not an angle pair.

- | | |
|---|---|
| 13.) $\angle 5$ and $\angle 1$
corresponding | 14.) $\angle 11$ and $\angle 4$
alternate interior |
| 15.) $\angle 6$ and $\angle 13$
consecutive interior | 16.) $\angle 4$ and $\angle 13$
not an angle pair |
| 17.) $\angle 2$ and $\angle 11$
alternate interior | 18.) $\angle 16$ and $\angle 12$
corresponding |



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

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

18.) If two lines are not coplanar, then they never intersect.

19.) If three lines intersect at one point, then they are Sometimes 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?

Parallel

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

Skew

