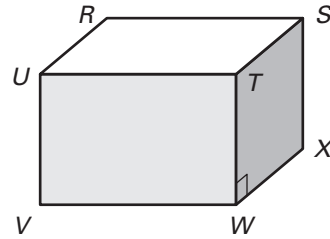


Practice B

For use with pages 129–134

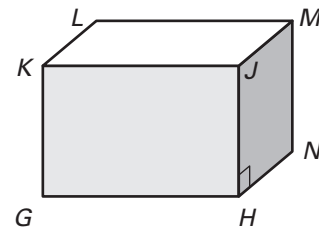
Think of each segment in the diagram as part of a line.
Fill in the blank with *parallel*, *skew*, or *perpendicular*.

- \overleftrightarrow{UT} and \overleftrightarrow{WT} are ____.
- \overleftrightarrow{RS} and \overleftrightarrow{VW} are ____.
- \overleftrightarrow{TU} and \overleftrightarrow{WX} are ____.
- plane VWT and plane RSX are ____.
- \overleftrightarrow{TW} and \overleftrightarrow{WX} are ____.



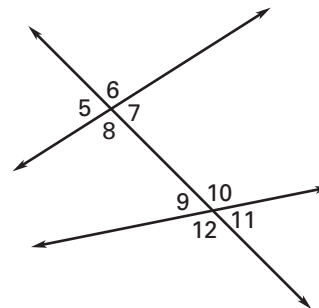
Think of each segment in the diagram as part of a line.
There may be more than one correct answer.

- Name a line parallel to \overleftrightarrow{HJ} .
- Name a line perpendicular to \overleftrightarrow{LM} .
- Name a line skew to \overleftrightarrow{GH} .
- Name a plane parallel to plane GHJ .
- Name a line perpendicular to \overleftrightarrow{JH} .



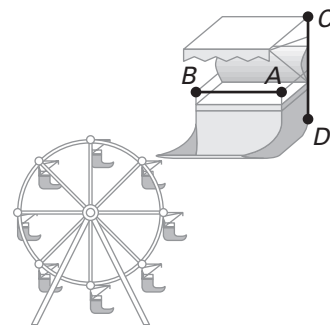
Complete the statement with *corresponding*, *alternate interior*, *alternate exterior*, or *consecutive interior*.

- $\angle 6$ and $\angle 10$ are ____ angles.
- $\angle 7$ and $\angle 9$ are ____ angles.
- $\angle 8$ and $\angle 9$ are ____ angles.
- $\angle 12$ and $\angle 8$ are ____ angles.
- $\angle 5$ and $\angle 11$ are ____ angles.
- $\angle 8$ and $\angle 10$ are ____ angles.



Use the diagram of the Ferris wheel to decide whether the statement is *true* or *false*.

- At any position around the wheel, the line containing the crossbar, \overleftrightarrow{AB} , of each cart is parallel to the ground.
- For any cart of the Ferris wheel, the line containing the back support, \overleftrightarrow{CD} , and the line containing the crossbar, \overleftrightarrow{AB} , are skew lines.
- At any position around the wheel, the line containing the back support, \overleftrightarrow{DC} , is perpendicular to the ground. (Assume the carts are hanging as shown in the diagram.)

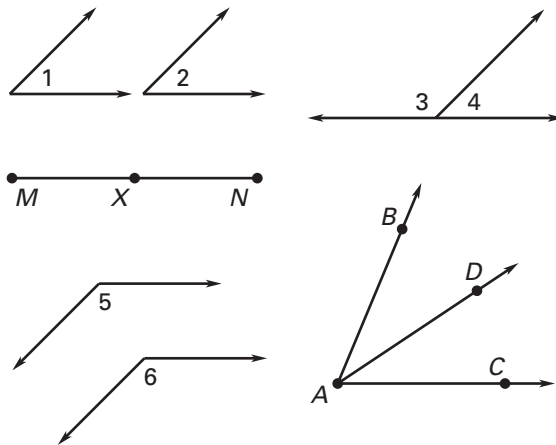


Practice B

For use with pages 136–141

State the reason for the conclusion.

- Given: $m\angle 1 = m\angle 2$
Conclusion: $\angle 1 \cong \angle 2$
- Given: $\angle 3$ and $\angle 4$ are a linear pair.
Conclusion: $\angle 3$ and $\angle 4$ are supplementary.
- Given: $\angle 5 \cong \angle 6$
Conclusion: $\angle 6 \cong \angle 5$
- Given: X is the midpoint of \overline{MN} .
Conclusion: $\overline{MX} \cong \overline{NX}$
- Given: \overrightarrow{AD} bisects $\angle BAC$.
Conclusion: $\angle BAD \cong \angle DAC$



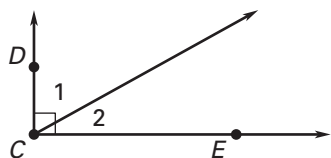
Find the value of x .

-
-
-

9. Complete the two-column proof of Theorem 3.2.

Given: $\overrightarrow{CD} \perp \overrightarrow{CE}$

Prove: $\angle 1$ and $\angle 2$ are complementary.

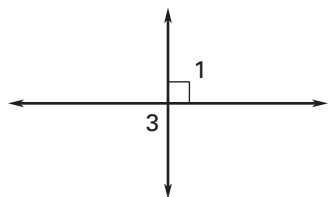


Statements	Reasons
1. $\overrightarrow{CD} \perp \overrightarrow{CE}$	1. _____
2. $\angle DCE$ is a right \angle .	2. _____
3. _____	3. Def. of right \angle
4. $m\angle DCE = m\angle 1 + m\angle 2$	4. _____
5. _____	5. Substitution
6. $\angle 1$ and $\angle 2$ are complementary.	6. _____

10. Complete the flow proof of a portion of Theorem 3.3.

Given: $\angle 1$ is a right angle.

Prove: $\angle 3$ is a right angle.



$\angle 1$ and $\angle 3$ are vertical \angle s.	$\angle 1$ is a right \angle .
a. _____ ↓	d. _____ ↓
$\angle 1 \cong \angle 3$	$m\angle 1 = 90^\circ$
b. _____ ↓	e. _____ ↓
$m\angle 1 = m\angle 3$	$m\angle 3 = 90^\circ$
c. _____	f. _____
→	$\angle 3$ is a right \angle .
g. _____	