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Module 8 Points, Lines, Angles, and Triangles
Lesson 3 Angle Relationships and Parallel Lines

Write $C$ if the angles are complementary, $S$ if they are supplementary, or $\mathbf{N}$ if they are neither.
1.

S
2.



N
4.


C

Use the diagram at right to answer the following:
5. Which angle is vertical to $\angle 6$ ? $\angle 3$
6. Which angle is vertical to $\angle 2$ ? $\angle 5$

7. Which angle is vertical to $\angle 4$ ? $\angle \mathbf{1}$
8. Suppose $m \angle 1=85^{\circ}$ and $m \angle 2=35^{\circ}$. Find the following:
a. $m \angle 3 \quad 60^{\circ}$
b. $m \angle 4 \quad 85^{\circ}$
c. $m \angle 5 \quad 35^{\circ}$
d. $m \angle 6 \quad 60^{\circ}$

Identify the special angle pair name for each pair below.
Write none if the pair has no special name.
9. $\angle 2$ and $\angle 7$

Alternate exterior
10. $\angle 8$ and $\angle 9$

Alternate interior

11. $\angle 4$ and $\angle 8$

Corresponding
12. $\angle 4$ and $\angle 11$

None
13. $\angle 1$ and $\angle 9$

Corresponding
$b \| c$ and $m \angle 7=92^{\circ}$
Find the following:
14. $m \angle 10$
$92^{\circ}$
15. $m \angle 11$
$92^{\circ}$
16. $m \angle 12$
$88^{\circ}$

