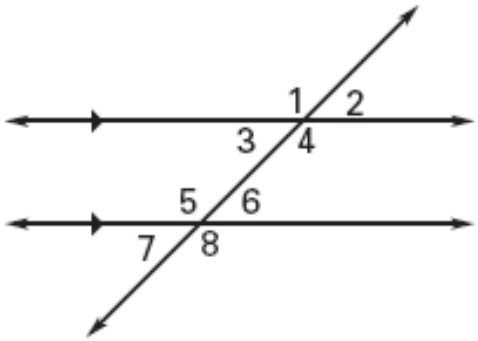
Geometry Notes **Name** _____

3.2 Use Parallel Lines and Transversals

When two **parallel lines** are intersected by a **transversal** the angles formed have certain characteristics.

- the pairs of **alternate interior angles are** _____.
- the pairs of **alternate exterior angles are** _____.
- the **corresponding angles are** _____.
- the **consecutive interior angles are** _____.



1. Classify $\angle 1$ and $\angle 8$. If $m\angle 1 = 132$, the $m\angle 8 =$ _____.

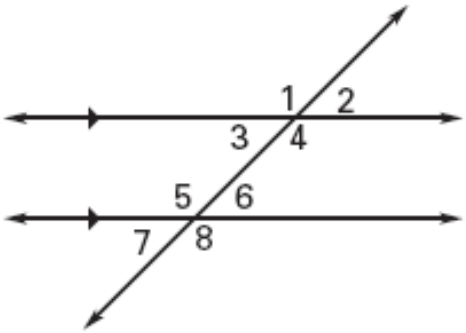
2. Classify $\angle 5$ and $\angle 3$. If $m\angle 5 = 122$, the $m\angle 3 =$ _____.

3. Classify $\angle 2$ and $\angle 6$. If $m\angle 2 = 46$, the $m\angle 6 =$ _____.

4. Classify $\angle 7$ and $\angle 4$. If $m\angle 7 = 37$, the $m\angle 4 =$ _____.

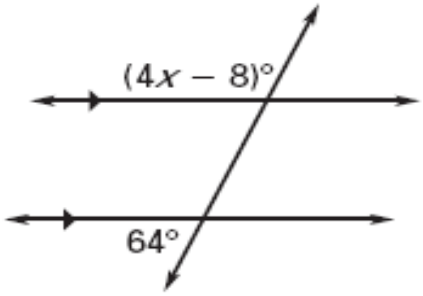
5. Classify $\angle 5$ and $\angle 8$. If $m\angle 5 = 24$, the $m\angle 8 =$ _____.

6. Classify $\angle 7$ and $\angle 8$. If $m\angle 7 = 102$, the $m\angle 8 =$ _____.

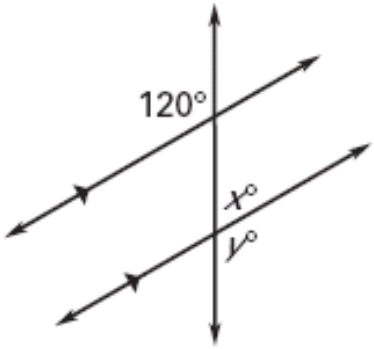


Examples

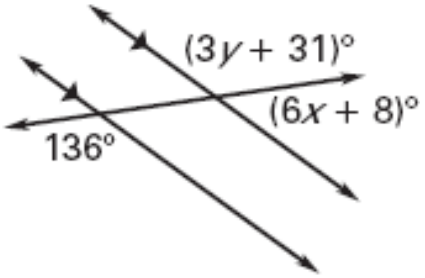
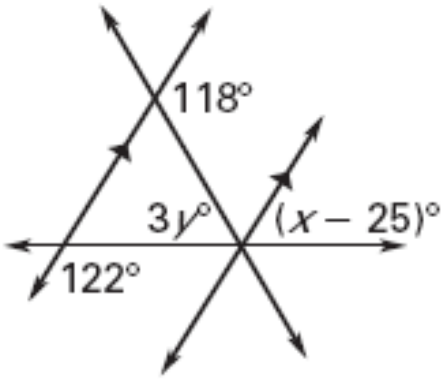
7. Find x.



8. Find x and y.



9. Find x and y.



10. Find x and y.