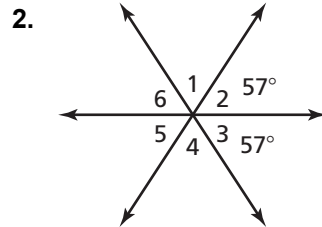
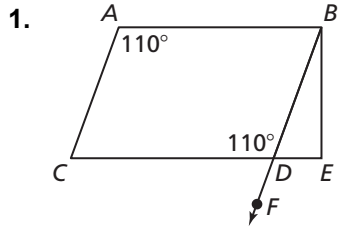


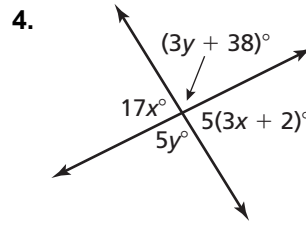
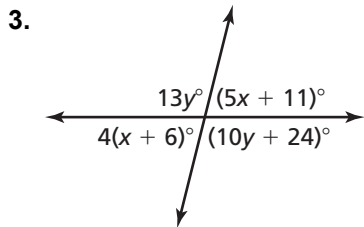
2.6

Practice A

In Exercises 1 and 2, identify the pairs of congruent angles in the figures. Explain how you know they are congruent.



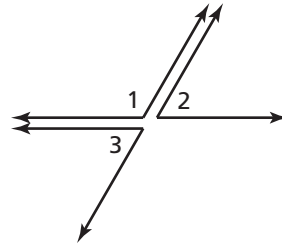
In Exercises 3 and 4, find the values of x and y .



5. Copy and complete the two-column proof.

Given: $\angle 1$ and $\angle 2$ are supplementary.
 $\angle 1$ and $\angle 3$ are supplementary.

Prove: $\angle 2 \cong \angle 3$

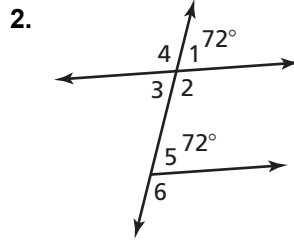
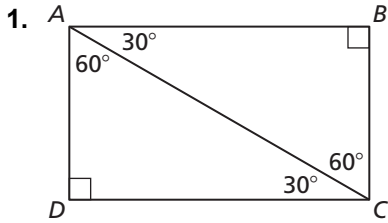


STATEMENTS	REASONS
1. $\angle 1$ and $\angle 2$ are supplementary. $\angle 1$ and $\angle 3$ are supplementary.	1. Given
2. $m\angle 1 + m\angle 2 = 180^\circ$ $m\angle 1 + m\angle 3 = 180^\circ$	2. _____
3. _____	3. Transitive Property
4. $m\angle 2 = m\angle 3$	4. _____
5. _____	5. Definition of congruent angles

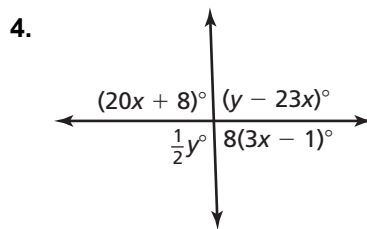
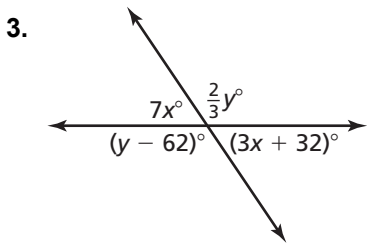
2.6

Practice B

In Exercises 1 and 2, identify the pairs of congruent angles in the figures. Explain how you know they are congruent.



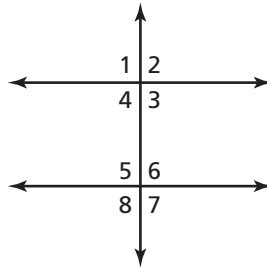
In Exercises 3 and 4, find the values of x and y .



5. Copy and complete the flowchart proof.

Given: $\angle 1$ is a right angle.
 $\angle 5$ is a right angle.
 $\angle 5$ and $\angle 8$ are supplementary.

Prove: $\angle 3 \cong \angle 8$



<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Given</p>	→	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Vertical Angles Congruence Theorem (Theorem 2.6)</p>	→	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Right Angle Congruence Theorem (Theorem 2.3)</p>	↘	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div>	
<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Given</p>	→	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Definition of a right angle</p>	↘	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Subtraction Property of Equality</p>	→	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Definition of a right angle</p>	
<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Given</p>	→	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Definition of supplementary angles</p>	↘	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Subtraction Property of Equality</p>	→	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Definition of a right angle</p>	
						↗	<div style="border: 1px solid black; border-radius: 10px; width: 100px; height: 30px; margin: 0 auto;"></div> <p style="text-align: center;">Right Angle Congruence Theorem (Theorem 2.3)</p>