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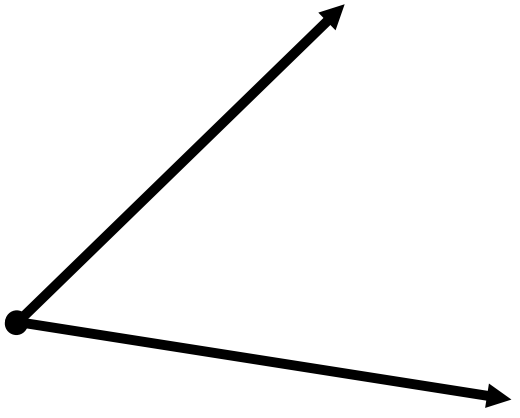

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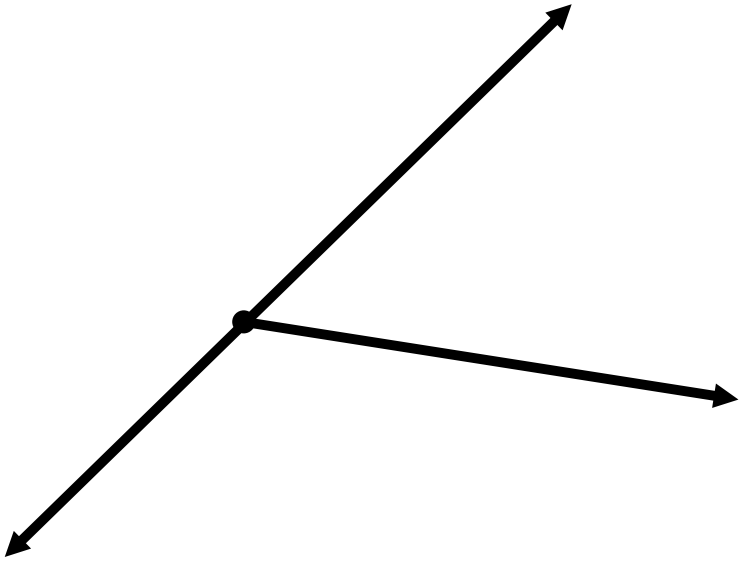

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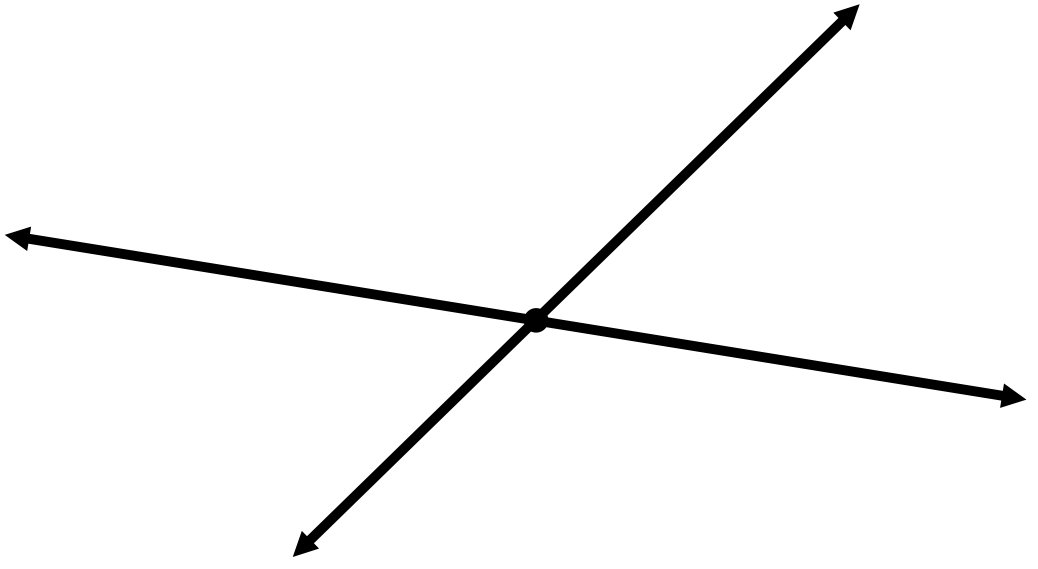

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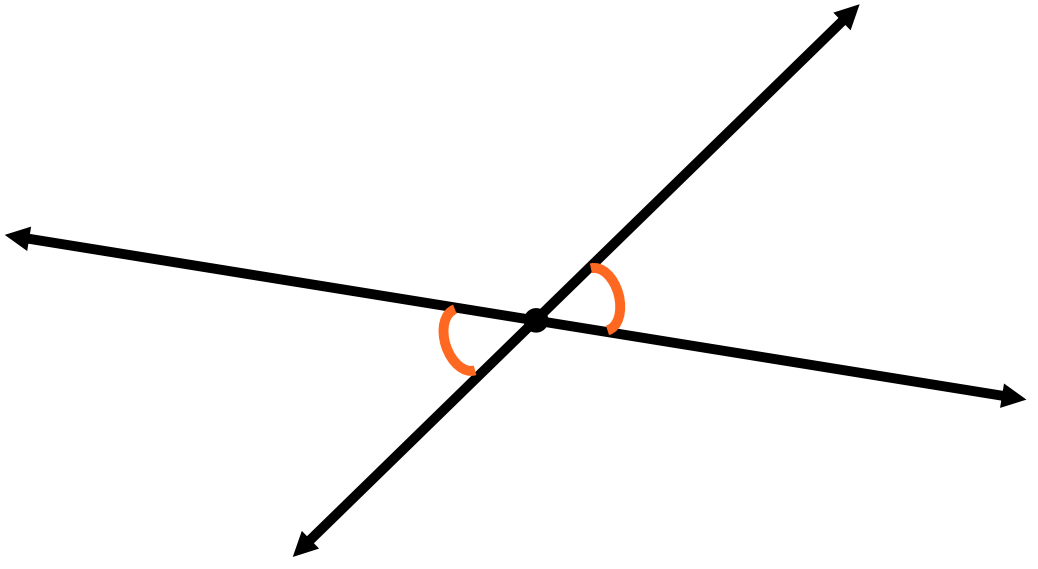

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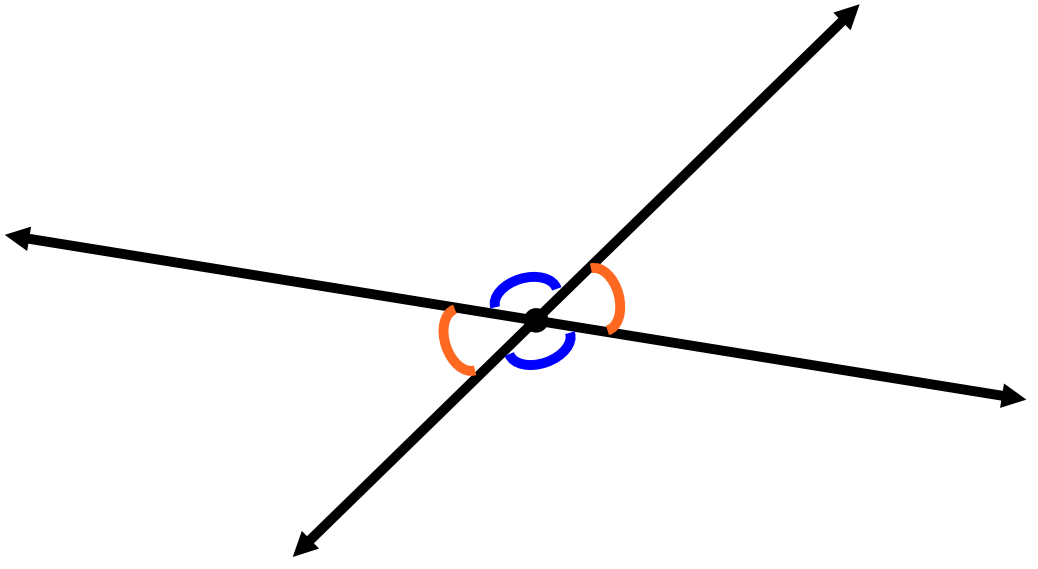

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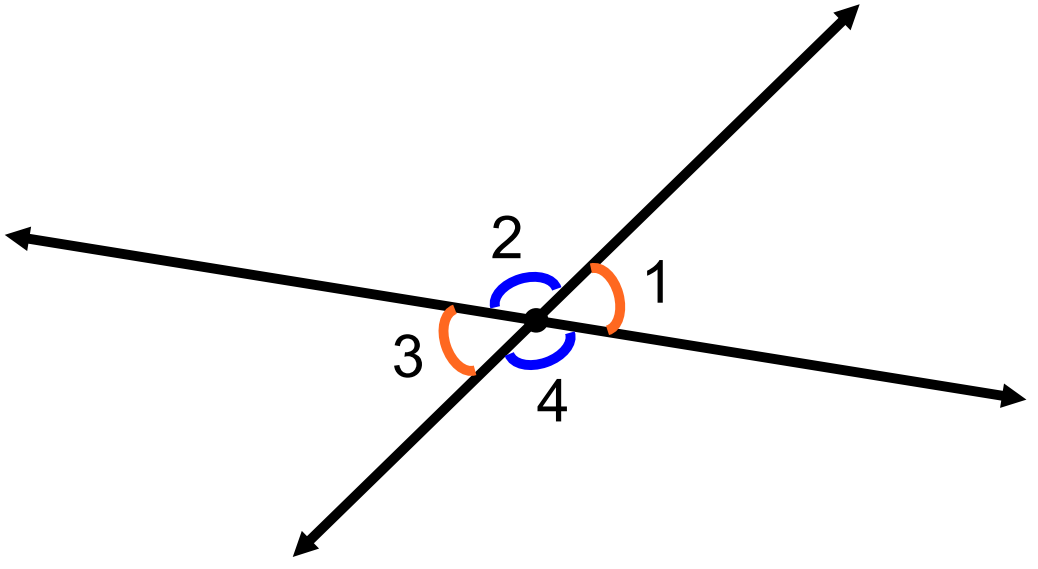

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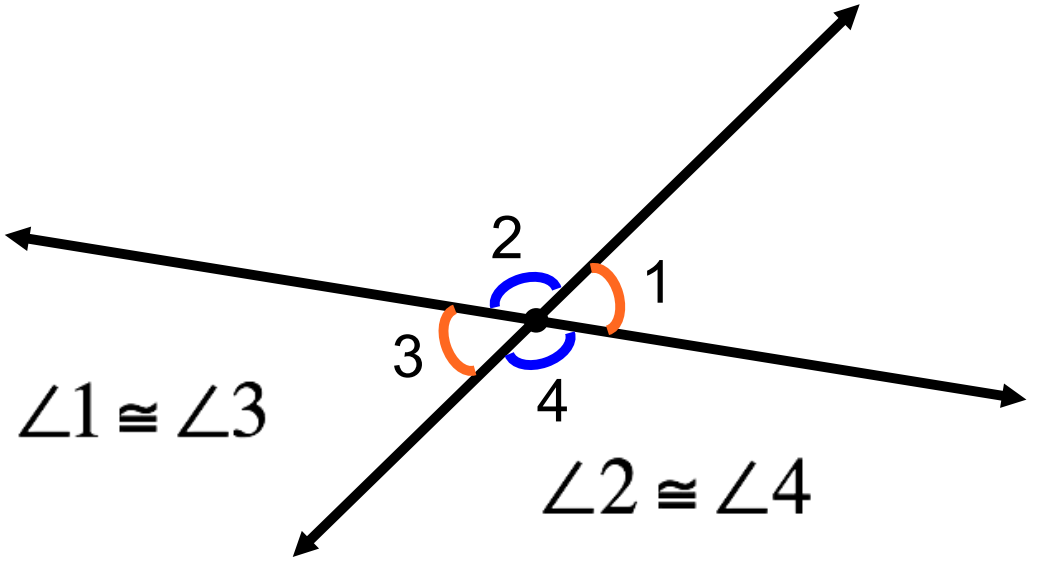

Theorem 18: Vertical angles are congruent.

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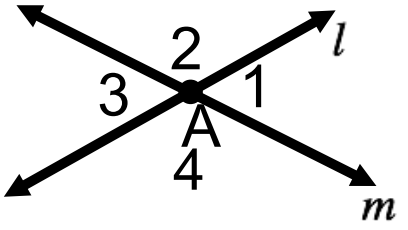
Given: Lines l and m intersecting at A



Prove: $\angle 1 \cong \angle 3$

Proof

Statement	Reason
1.	**1.**
2.	**2.**
3.	**3.**
4.	**4.**

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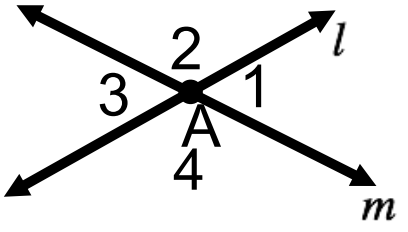

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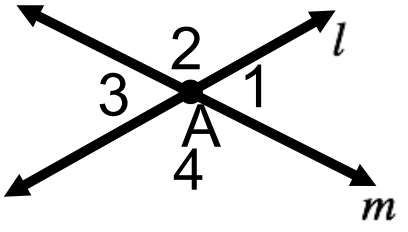

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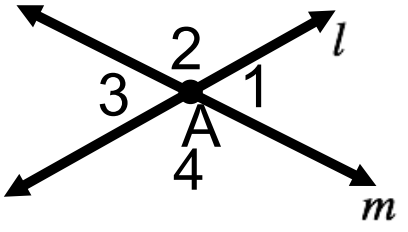

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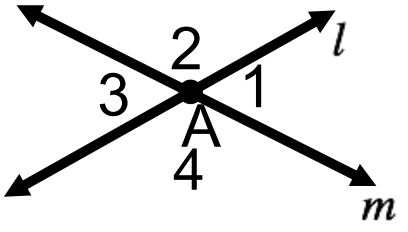

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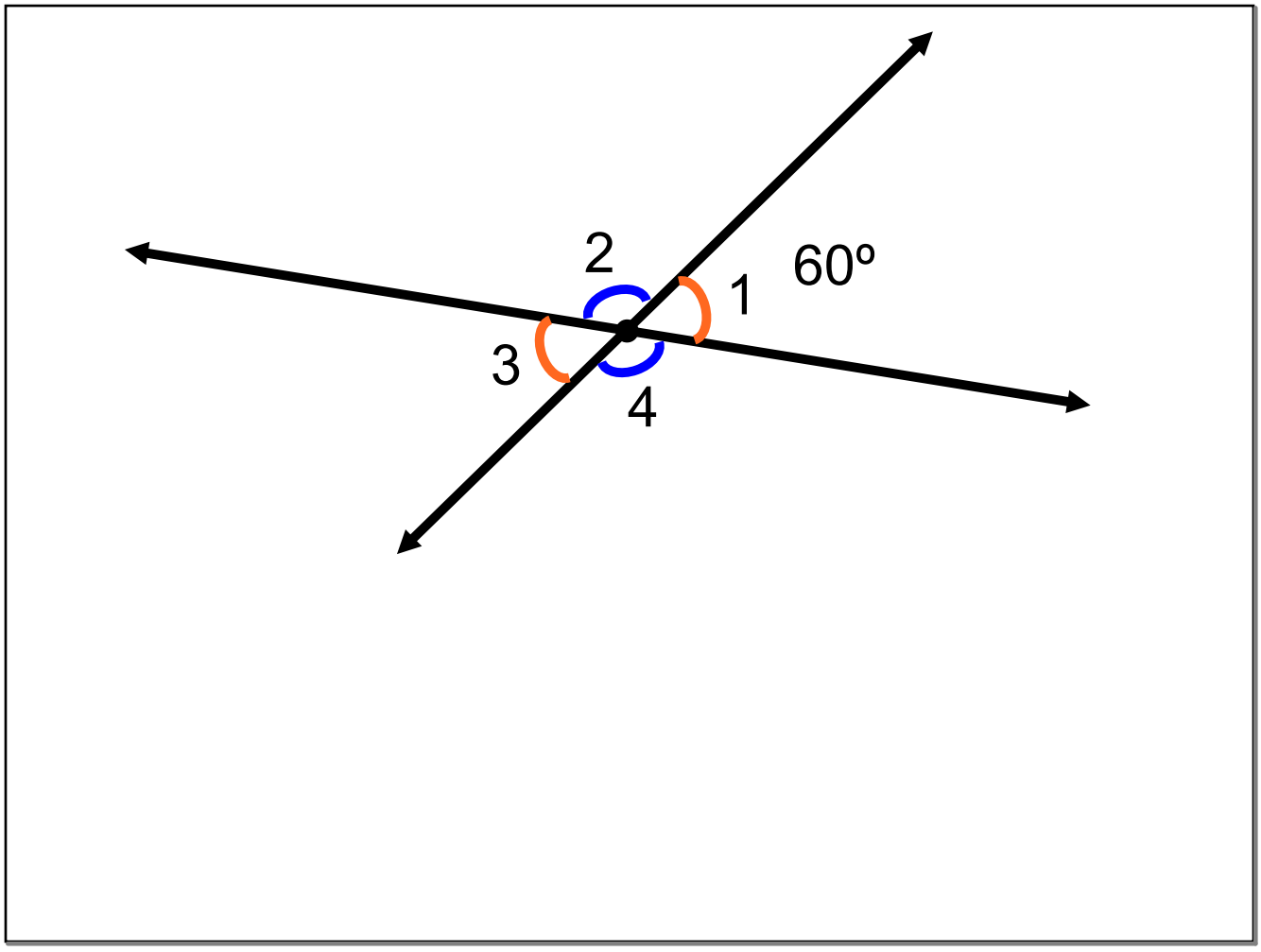
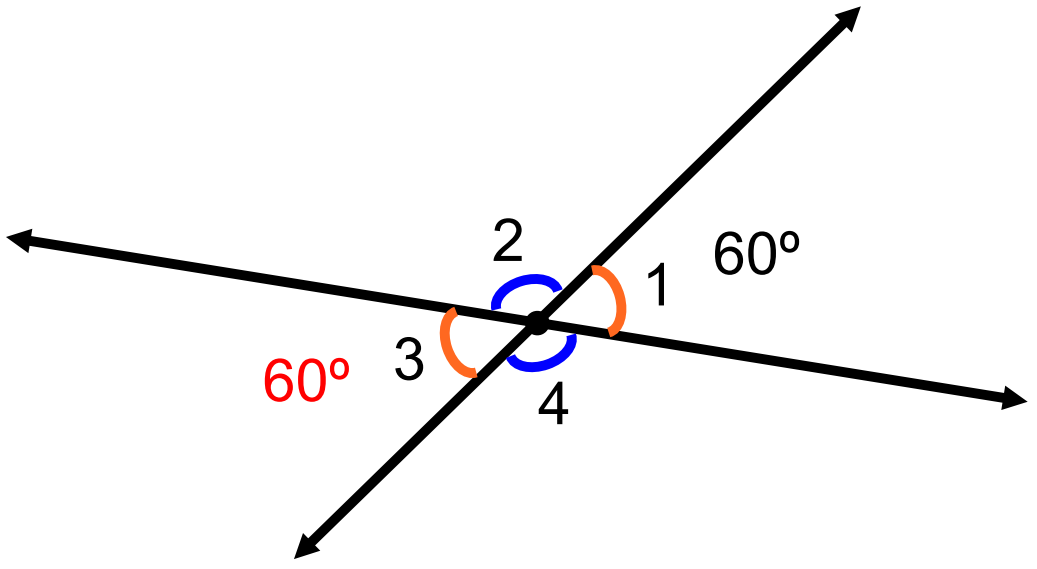
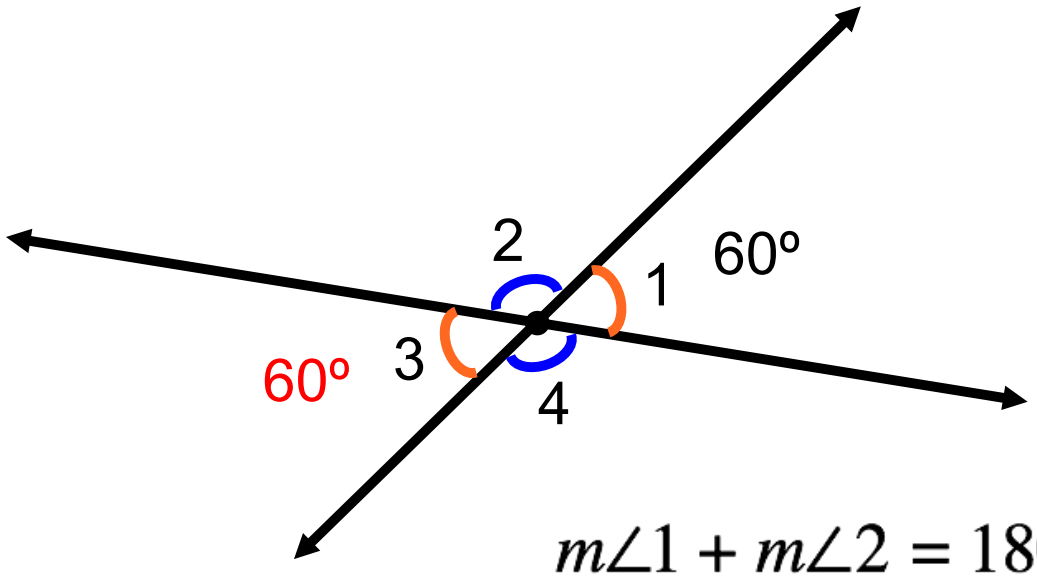
4. $\angle 1 \cong \angle 3$	**4.** $\angle$'s supp. to same $\angle$ are $\cong$


2
60º
1
3
4

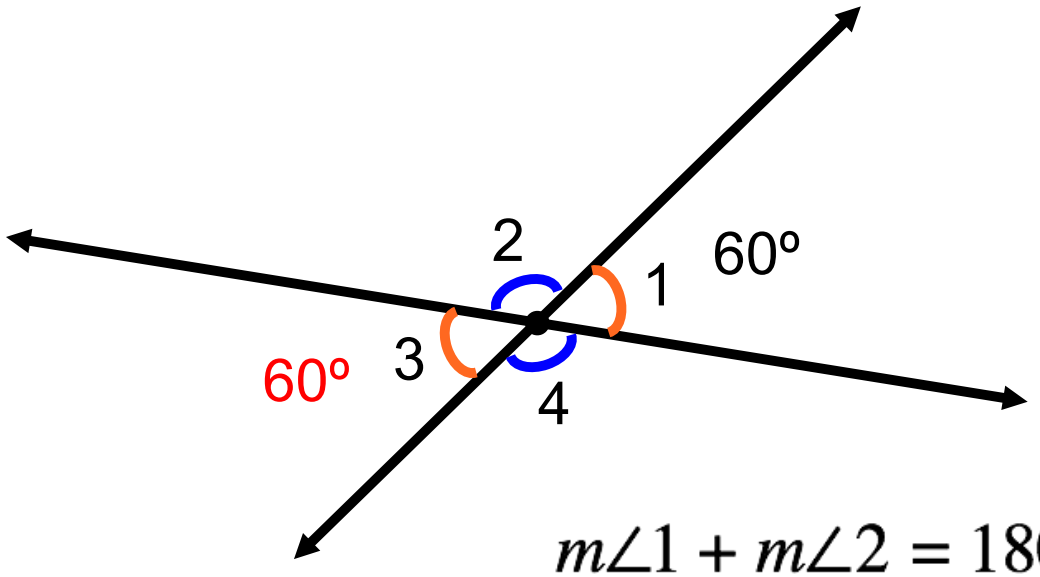


$m\angle 1 = m\angle 3 = 60^\circ$



$m\angle 1 + m\angle 2 = 180°$

$m\angle 1 = m\angle 3 = 60°$



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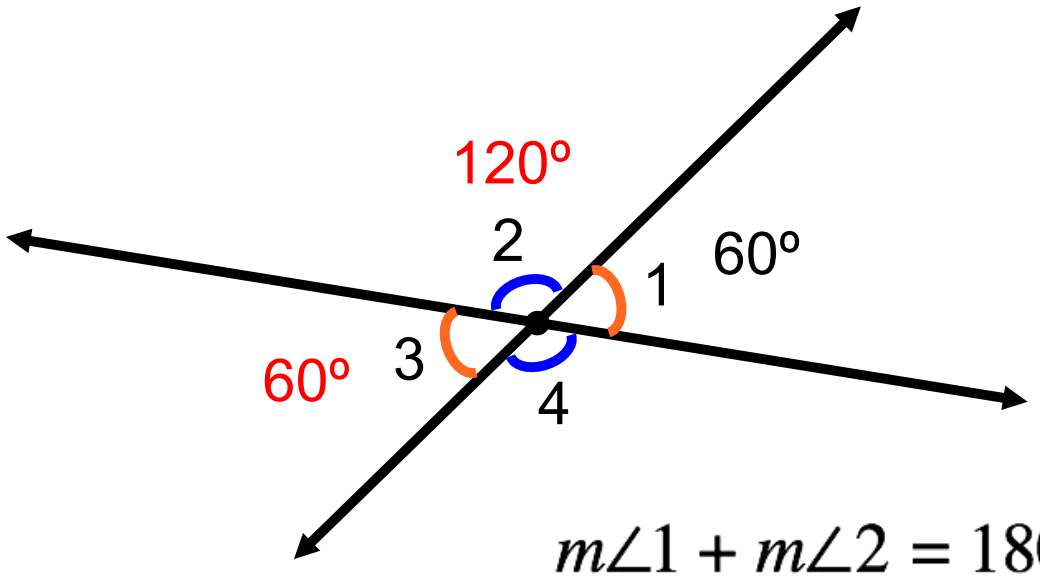

$m\angle 1 = m\angle 3 = 60°$

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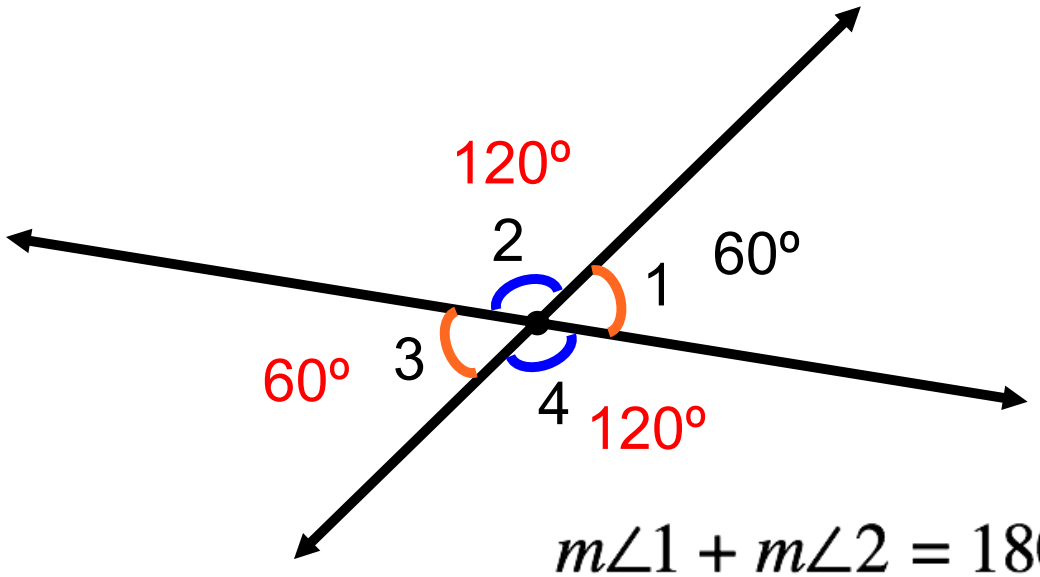
$60° + m\angle 2 = 180°$

$m\angle 2 = 120°$



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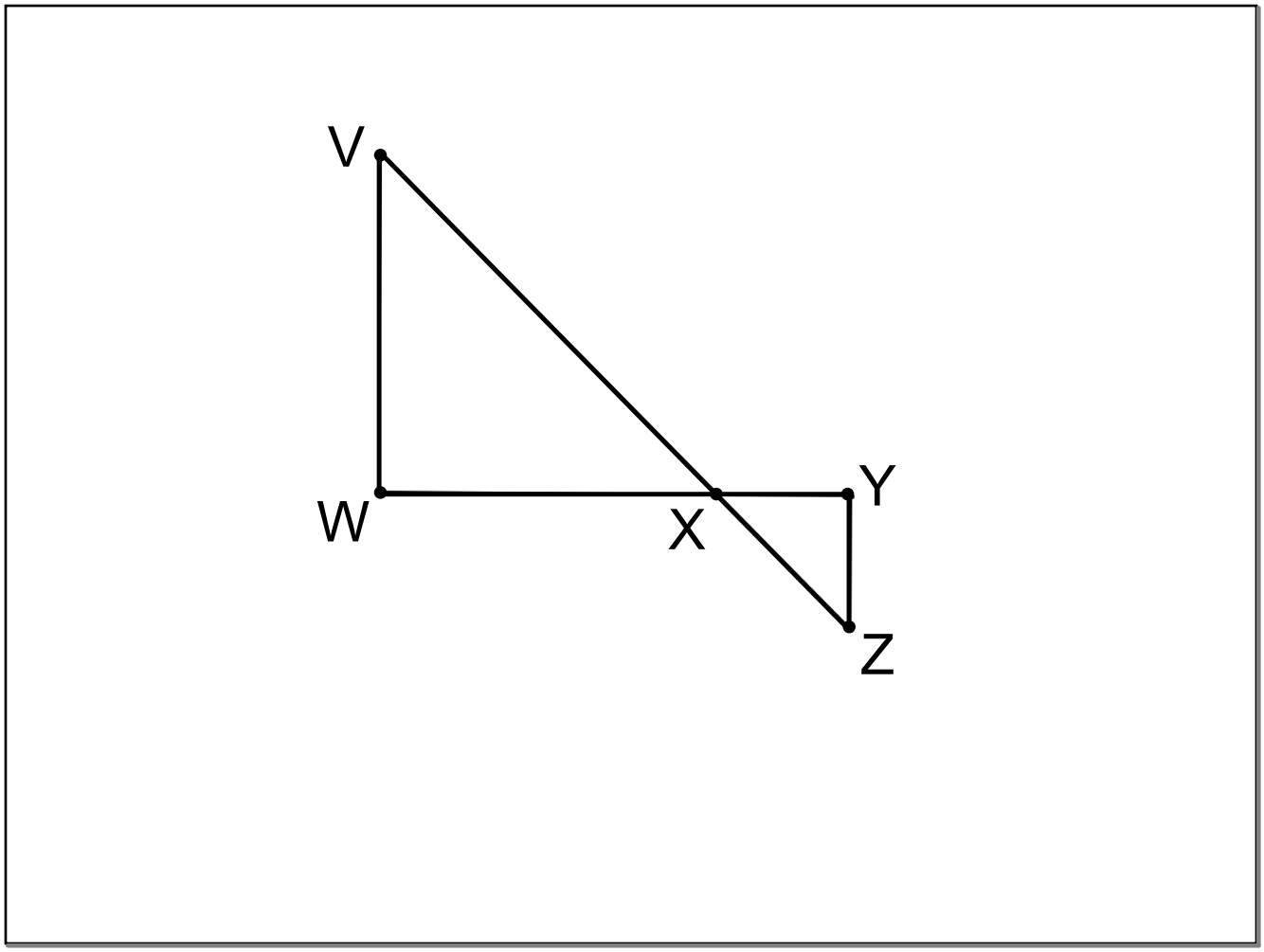
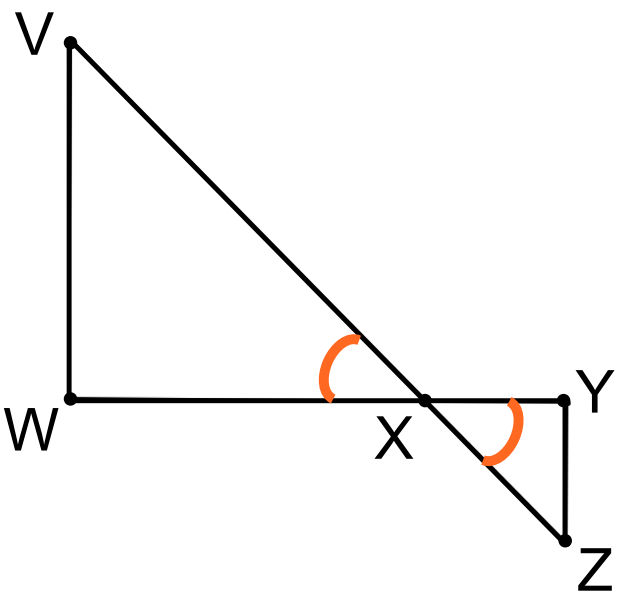
$m\angle 2 = 120°$

$m\angle 2 = m\angle 4 = 120°$


V
W
X
Y
Z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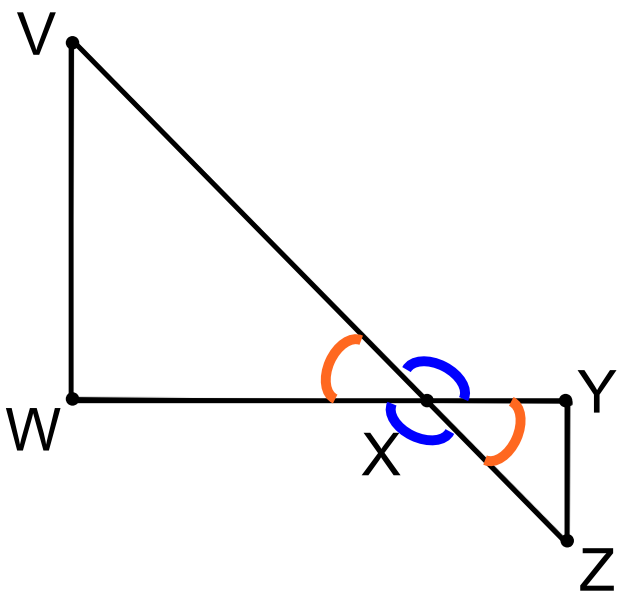
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