1.

Given: \( \overline{BA} \perp \overline{AT} \)

Find: \( m \angle MAT \)

2. 

A certain angle is 39° less than 2 times its complement. Find its supplement.

3. 

The measure of the supplement of an angle exceeds three times the complement by 40°. Find the supplement.
4. Find $m \angle ABC$

![Diagram with points A, B, C, D, E and expressions for alternate interior angles]

5. \( \overline{UL} \perp \overline{UK} \). $m \angle 1 = (x^2 + 18)^\circ$ and $m \angle 2 = (x + 30)^\circ$. Find all possible values for $m \angle 1$.

![Diagram with points U, L, E, K and angles 1 and 2]
6.

Given: \( \angle 1 = \angle 2 \)
BG bis. \( \angle ABF \)
CE bis. \( \angle DCF \)

Prove: \( \angle 3 = \angle 4 \)

Statements

Reasons
7.

Given: \( \angle 1 = \angle 2 \)

PE bis. \( \angle APN \)

NE bis. \( \angle ANP \)

Prove: \( \angle XPE \cong \angle ENY \)
8.

**Given:** $KY \perp YL$

$\angle 2$ is supplementary to $\angle 3$

**Prove:** $\angle 1$ is complementary to $\angle 4$

<table>
<thead>
<tr>
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[Diagram of triangle with labeled angles]
9.

Given:
- BD bisects \( \angle ABC \)
- CD bisects \( \angle ACB \)
- \( \angle ABC = \angle ACB \)
- \( \angle 1 \) is complementary to \( \angle 3 \)
- \( \angle 6 \) is complementary to \( \angle 4 \)

Prove: \( \angle 3 = \angle 4 \)