

Proof Review Answer Key:

<u>1) Statements</u>	<u>Reasons</u>
	1) given
	2) Theorem 2-6
4) $\angle 1$ and $\angle 3$ are comp.	
5) $\angle 1 + \angle 3 = 90$	
	6) transitive property
7) $m\angle 1 = m\angle 2$	7) subtraction property
8) ray EB bisects $\angle AEC$	8) def. of an angle bisector

<u>2) Statements</u>	<u>Reasons</u>
	1) given
	2) division property
	3) given
	4) Theorem 2-2
	5) substitution property

<u>3) Statements</u>	<u>Reasons</u>
	1) given
	2) reflexive property
	3) addition property
	4) segment addition postulate
	5) substitution property

<u>4) Statements</u>	<u>Reasons</u>
1) $KP = ST$ and $PR = TV$	
	2) addition property
	3) segment addition postulate
4) $KR = SV$	

<u>5) Statements</u>	<u>Reasons</u>
	2) transitive property
3) $m\angle 1 = m\angle 4$	
	4) subtraction property

6) <u>Statements</u>	<u>Reasons</u>
1) $m\angle AOI = m\angle EOU$	2) reflexive property 3) angle addition postulate 4) transitive
5) $m\angle 1 = m\angle 3$	5) subtraction property

7) <u>Statements</u>	<u>Reasons</u>
1) $m\angle 1 = m\angle 3$	2) reflexive property 3) addition property 4) angle addition postulate 5) substitution property

8) <u>Statements</u>	<u>Reasons</u>
	1) given 2) Theorem 2-2
3) $m\angle RST = m\angle SRT$	4) division property
5) $m\angle 1 = m\angle 2$	5) transitive property

9) <u>Statements</u>	<u>Reasons</u>
	1) given 2) Theorem 2-1
3) $PQ = RS$	4) division property
5) $PM = RN$	5) steps 2 and 4

10) <u>Statements</u>	<u>Reasons</u>
	1) given 2) Theorem 2-6 3) given 4) def. of comp. angles 5) transitive property
6) $m\angle 1 = m\angle 1$	7) subtraction property