

Translating Necessary and Sufficient Conditions

Name:

E-mail:

Translate the following English sentences into Propositional Logic. Use ">" for the horseshoe and "iff" for the triplebar. Provide a dictionary, separating dictionary entries with a semi-colon.

1. A necessary condition for the death of a vampire is a wood stake through the heart.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

2. A sufficient condition for a flood is the presence of water over the high water mark.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

3. A necessary condition for being human is having a heart.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

4. Having a kidney is not a necessary condition for being a water bug.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

5. A sufficient condition for being human is being a featherless biped.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

6. Rationality is not a necessary condition for caninehood.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

7. A sufficient condition for being a triangle is being a closed three-sided figure.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

8. Bravery is not sufficient for courage.

dictionary:	<input type="text"/>
translation:	<input type="text"/>

9. Bravery is not necessary for courage.

dictionary:	<input type="text"/>
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translation:	
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10.

Bicycle-riding mathematicians are necessarily bipedal.

dictionary:	
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translation:	
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[Answers](#) - Check after submitting!

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