Answer the discussion questions in writing.

1. What are all possible values of a Boolean expression?

In C#, the value of a Boolean expression can only be True or False. In some languages, unassigned variables can be undefined and cause errors, but C# avoids this problem by requiring that all variables are assigned a value before examining them.

1. List eight Boolean operators.

==  
!=  
<  
<=  
>  
>=  
&&  
||

1. What are the differences in how short circuiting works for && and ||?

If the left operand of the && operator is to false, the result of the entire expression is false.  
If the left operand of the || operator is true, the result of the entire expression is true.  
In these cases, the && and || operators bypass the evaluation of the right operand.

1. Look at the list of operators. What operator has the highest precedence? Which has the lowest?

The parentheses () has the highest precedence. Any operation within parentheses takes place before anything outside of the parentheses operates on it.  
The subtraction – has the lowest precedence.

1. In an if or else construction using multiple lines of code, what effect does the use of curly braces have?

The curly braces demark the beginning and end of the block of code evaluated in the if or else.

1. In a switch statement, what happens if you omit break ?

In C#, the break statement is mandatory for every case in a switch statement (even the default case). The compiler will not execute the code if you omit break.