(Q4)
The contrapositive of a conditional statement $A \Rightarrow B$ is $\neg B \Rightarrow \neg A$.
This is because $A \Rightarrow B$ does not go both ways:

$$A \Rightarrow B \neq B \Rightarrow A$$

Intuitively speaking, $A \Rightarrow B$ means that "If A is true, then B must be true." This does not necessarily imply that "If B is true, then A must be true", as B being true does not necessarily mean that A is true.
In order to achieve the logical equivalent of $A \Rightarrow B$, we need to negate both the condition and outcome in $B \Rightarrow A$:

$$A \Rightarrow B = \neg B \Rightarrow \neg A$$

This clearly makes more sense, as from the earlier intuitive definition, if B is false then we know that A is false.
To apply this to the given statement:

> If it's raining, then it's cloudy.

The logical equivalent of this statement is not "If it's cloudy, then it's raining". We know this intuitively: Just because it's cloudy, it doesn't mean there is rain. In order to achieve logical equivalency, we need to negate both sides:

> If it's not cloudy, then it's not raining.

Which is the given contrapositive of the given statement.