Peter and Quentin

Peter and Quentin are good friends and both like bike riding but their mum's have different rules. Peter's mum wants Peter to get fit so her rule is

"If it's not raining you ride your bike to school"

Quentin's mum is a bit over-protective. Her rule is

"If it's raining you don't ride your bike"

Using propositions p and q for "bike riding" and r for "raining" draw up truth tables using the implicit function (if...then) for both rules.

What can you conclude if you were to observe the following on any one day.

1) Peter and Quentin riding their bikes together.
2) Peter riding on his own.
3) Quentin riding on his own.
4) Neither of them riding their bikes to school.

rg ✂