**Logic Tool Results**

Logical Expression: ¬p∨¬q⊢¬(p^q)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Line | Expression | Rule | First Segment | Second Segment | Third Segment |
| 1 | ¬p∨¬q | Data |  |  |  |
| 2 | ¬p | Assumption |  |  |  |
| 3 | p^q | Assumption |  |  |  |
| 4 | p | ∧e1 | 3 |  |  |
| 5 | ⊥ | ¬e | 2 | 4 |  |
| 6 | ¬p^q | ¬i | 3-5 |  |  |
| 7 | ¬q | Assumption |  |  |  |
| 8 | p^q | Assumption |  |  |  |
| 9 | q | ∧e2 | 8 |  |  |
| 10 | ⊥ | ¬e | 7 | 9 |  |
| 11 | ¬(p^q) | ¬i | 8-10 |  |  |
| 12 | ¬(p^q) | ∨e | 1 | 2-6 | 7-11 |