Main Expression: (p→q)→¬q⊢(¬q→p)→p

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Line | Expression | Rule | First Segment | Second Segment | Third Segment |
| 1 | (p→q)→¬q | Data |  |  |  |
| ┌--------------------------------------------------------------------------------------------------------------┐ | | | | | |
| 2 | ¬q→p | Assumption |  |  |  |
| ┌------------------------------------------------------------------------------------------------------┐ | | | | | |
| 3 | ¬p | Assumption |  |  |  |
| ┌----------------------------------------------------------------------------------------------┐ | | | | | |
| 4 | p | Assumption |  |  |  |
| 5 | ⊥ | ¬e | 3 | 4 |  |
| 6 | q | ⊥e | 5 |  |  |
| └----------------------------------------------------------------------------------------------┘ | | | | | |
| 7 | p→q | →i | 4-6 |  |  |
| 8 | ¬q | MP | 1 | 7 |  |
| 9 | p | MP | 2 | 8 |  |
| 10 | ⊥ | ¬e | 3 | 9 |  |
| └------------------------------------------------------------------------------------------------------┘ | | | | | |
| 11 | p | PBC | 3-10 |  |  |
| └--------------------------------------------------------------------------------------------------------------┘ | | | | | |
| 12 | (¬q→p)→p | →i | 2-11 |  |  |