Main Expression: ⊢¬p→(p→(p→q))

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