Assignment 3

As an extra credit, show that the omega-spectrum exists.

1. If $\omega$ is an ordinal greater than 3, then $\omega$ is not a successor to any ordinal $\alpha < \omega$.

2. If $\omega$ is an ordinal greater than 3, then $\omega$ is not equal to the successor of any ordinal $\alpha < \omega$.

3. A limit ordinal $\omega$ is not the successor of any ordinal $\alpha < \omega$.

4. A limit ordinal $\omega$ is not equal to the successor of any ordinal $\alpha < \omega$.

5. If $\omega$ is an ordinal greater than 3, then $\omega$ is not the limit of any ordinal $\alpha < \omega$.

6. If $\omega$ is an ordinal greater than 3, then $\omega$ is not equal to the limit of any ordinal $\alpha < \omega$.

7. The omega-spectrum exists if and only if $\omega$ is an ordinal greater than 3.

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30. The omega-spectrum exists if and only if $\omega$ is an ordinal greater than 3.