Group Work on Logarithms and big-O CSC-024, Prof. Ostheimer

Decide if the following statements are true or false.

- 1. $\log(x)$ is $O(\log(x))$
- 2. $(\log(x))^2$ is $O(\log(x))$
- 3. $\log(x^2)$ is $O(\log(x))$
- 4. $\log(2^x)$ is $O(\log(x))$
- 5. $\log(2^x)$ is O(x)
- 6. $\log(2^{(x^2)})$ is O(x)
- 7. $\log((2^x)(x^2))$ is O(x)
- 8. $\log_{16}(x)$ is $O(\log(x))$
- 9. $\log(x)$ is $O(\log_{16}(x))$