

# Problem of the Day

True or False?

1.  $2n^2 + 1 = O(n^2)$

2.  $\sqrt{n} = O(\log n)$

3.  $\log n = O(\sqrt{n})$

4.  $n^2(1 + \sqrt{n}) = O(n^2 \log n)$

5.  $3n^2 + \sqrt{n} = O(n^2)$

6.  $\sqrt{n} \log n = O(n)$

7.  $\log n = O(n^{-1/2})$