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1. $T(n) = 5 = O(1)$

   $O(1) = 5$

   $5 \leq 5 . 1$

   maka, untuk $n \geq 1$ ($c = 5$ dan $n_0 = 1$)

2. $T(n) = \frac{n(n-1)}{2} + n - 1 = O(n^2)$

   $O(n^2) = \frac{n^2}{2} + \frac{n}{2} - 1$

   $\frac{n^2}{2} + \frac{n}{2} - 1 \leq \frac{n^2}{2} + \frac{n^2}{2} + n^2 = 2n^2$

   untuk $n \geq 1$ ($c = 2$ dan $n_0 = 1$)

3. $T(n) = 6 . 2^n + 2n^2 = O(2^n)$

   $O(2^n) = 6 . 2^n + 2n^2$

   $6 . 2^n + 2n^2 \leq 6 . 2^n + 2 . 2^n = 8 . 2^n$

   untuk $n \geq 1$ ($c = 8$ dan $n_0 = 1$)

4. $T(n) = 1 + 2 + \ldots + n = O(n^2)$

   $O(n^2) = 1 + 2 + \ldots + n$

   $1 + 2 + \ldots + n \leq n + n + \ldots + n = n^2$

   untuk $n \geq 1$ ($c = 1$ dan $n_0 = 1$)

5. $T(n) = n! = O(n^n)$

   $n! = 1 . 2 . \ldots . n \leq n . n . \ldots . n = n^n$

   untuk $n \geq 1$ ($c = 1$ dan $n_0 = 1$)

6. $T(n) = 1^k + 2^k + \ldots + n^k = O(n^{k+1})$

$1^k + 2^k + \ldots + n^k \leq n^k + n^k + \ldots + n^k = n^{k+1}$

untuk $n \geq 1$ ($c = 1$ dan $n_0 = 1$)

7. $T(n) = 5 \log(3^n) = O(n)$

$5 \log(3^n) \leq 5n = 5n$

untuk $n \geq 1$ ($c = 5$ dan $n_0 = 1$)

8. $T(n) = \log(n!) = O(n \log(n))$

$\log(n!) \leq n \log n$

untuk $n \geq 1$ ($c = 1$ dan $n_0 = 1$)

9. $T(n) = an^2 + bn + c$

0, 1, 3, 6, 10

1 2 3 4

1 1 1

$T(1) = a + b + c = 0$

$T(2) = 4a + 2b + c = 1$

$T(3) = 9a + 3b + c = 3$

$T(4) = 16a + 4b + c = 6$

$T(5) = 25a + 5b + c = 10$

$8a + 2b = 3$

$6a + 2b = 2$ −

$2a = 1$

$a = 1/2$

$b = -1/2$

$c = 0$