

Chapter 23 Algorithm Efficiency and Sorting

1.

$$500, 44 \log n, 3n, 10n \log n, 2n^2, \frac{5n^3}{4032}, \frac{2^n}{45}$$

2. mA: $O(n)$. mB: $O(n^2)$. mC: $O(n)$. mD: $O(n)$

3. Adding two matrices: $O(n*m)$. Multiplying two matrices: $O(nmk)$

4. Omitted.

5. Omitted.

6. Omitted.

7. Omitted.

8. Omitted.