

Textbook Exercise Solutions

- 4.2 16
- 4.3 20
- 4.4 $f(x) = x$
- 4.6 $n(n+1)$
- 4.8 $2^{10}, 2^{\log n}, 3n+100\log n, 4n, n\log n, 4n\log n+2n, n^2+10n, n^3, 2^n$
- 4.9 n
- 4.10 n
- 4.11 n^2
- 4.12 n
- 4.13 n^3
- 4.23 because $2^{n+1} = 2 \cdot 2^n$
- 4.25 because $n > \log n$ for all natural n
- 4.29 $n\log n$
- 4.30 $n\log n$
- 4.31 best $n\log n$, worst n^2
- 4.32 n^2

Please look at Creativity questions too!