Asymptotic notation

Put these functions in order so that if $f(n) \in O(g(n))$ (i.e. $f(n)$ is Big-Oh of $g(n)$), then $f(n)$ appears before $g(n)$ in the list. Group together functions that have the same asymptotic order of growth (i.e. $f(n) \in \Theta g(n)$).

\begin{align*}
&n^2, \ n \log n, \ n^3 + \log n, \ \sqrt{n}, \ n^2 + 2n \log n, \\
&\log \log n, \ 17 \log n, \ 10n^2, \ n^5 - n^4 + 2n, \\
&5n^2 \log \log n, \ 3n^2 + n^3 \log n, \ n + 6 \log n
\end{align*}