Below are the asymptotic runtimes for five algorithms. Order them from fastest to slowest.

\[
\begin{align*}
    f_1 &= O(n^2) \\
    f_2 &= O(n \cdot \log(n)) \\
    f_3 &= \Omega(n^3) \\
    f_4 &= \Omega(n^2 \log^4(n)) \\
    f_5 &= \Theta(n^2)
\end{align*}
\]

Fastest:
\[
f_2 = O(n \cdot \log(n))
\]

2nd fastest:
\[
f_1 = O(n^2)
\]

Middle:
\[
f_5 = \Theta(n^2)
\]

2nd slowest:
\[
f_4 = \Omega(n^2 \log^4(n))
\]

Slowest:
\[
f_3 = \Omega(n^3)
\]