Name _____Solutions_____ Discrete I, Quiz 24

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

$$f_1 = O(n^2)$$
$$f_2 = O(n \cdot \log(n))$$
$$f_3 = \Omega(n^3)$$
$$f_4 = \Omega(n^2 \log^4(n))$$
$$f_5 = \Theta(n^2)$$

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:
$$f_3 = \Omega(n^3)$$