For each of the following functions $f_i(n)$, express its asymptotic complexity in a simplest form such as $\Theta(1)$, $\Theta(\log_2 n)$, $\Theta(\log_2 \log_2 n)$, $\Theta(n)$, $\Theta(n \log n)$, $\Theta(n^k)$, $\Theta(2^n)$, etc.

1. $f(n) = 4^{5n+9} = \Theta($ 2^{10n} $)$;

2. $f(n) = \log_3(2n^4 + 6n^3) + \sqrt{12n + 14} = \Theta($ Sqrt(n) $)$;

3. $f(n) = \sqrt{5n^{10} + 4n + 8} = \Theta($ n^5 $)$;

4. $f(n) = \sqrt{6n + 45} \cdot (\log_4(n^3 - 12n) + 7) = \Theta($sqrt(n) x log(n)$)$;

5. $f(n) = 8^{3n+9} = \Theta($ 2^(9n) $)$;

6. $f(n) = (6n + 5)^{0.2} \cdot (3n + 8)^{0.4} + \log_2(n^3 + 48n^2) = \Theta($ n^{0.6} $)$;

7. $f(n) = 4^{3n+1} = \Theta($ 2^{6n} $)$;

8. $f(n) = \log_4(3n^2 + 5n - 8) = \Theta($ log n $)$;

9. $f(n) = \log_5(\sqrt{2n} + 3) = \Theta($ log n $)$;

10. $f(n) = \sum_{i=1}^{2n} \frac{n^2}{i} = \Theta($ n^2 log n $)$;