Calculus

High Order Derivatives

For each problem, find the indicated derivative with respect to *x*.

1) $f(x) = 4x^2$ Find $f^{(4)}$

2) $f(x) = -2x^5$ Find f''

3) $f(x) = -4x^5 + x^4 - 5x^3$ Find f''

4) $f(x) = 3x^4 + 3x^3$ Find f''

5) $f(x) = 5x^5$ Find f''

6) $f(x) = x^5 + 2x^3 + 2x$ Find f''

7) $f(x) = 4x^5 + 3x^4 - 5x$ Find $f^{(4)}$

8) $f(x) = 4x^4 - 5x^2 + 3x$ Find f'''

9) $f(x) = x^5 - 4x^3 - 4x$ Find f'''

10) $f(x) = 3x^5 + 2x$ Find f''

11) $f(x) = 3x^5$ Find f'''

12) $f(x) = 2x^5 + 2x^4$ Find f'''

13) $f(x) = x^5 - 2x^3 + 5x^2$ Find f''

14) $f(x) = 2x^4 - 2x^3$ Find $f^{(4)}$

15) $f(x) = -3x^5 + x^4$ Find f'''