

1. $D_x(x^5 + 2x^2 - 3x + 1)^5$
2. $D_x(x^2 \sin x^3)$
3. $\frac{d}{d\theta} \frac{\sqrt{\theta}}{\cos(\theta) + 1}$
4. $f'(x)$ where $f(x) = x\sqrt{x^3 + 2x - 1}$
5. $D_x \sin(\sqrt[3]{2x - 1})$
6. $\frac{d}{dt} \sin(\tan t)$
7. $D_x \frac{\sin(14.3\pi)}{\log(2.13e^3)}$
8. $D_x(x \sin(x) \cos^2(x))$
9. $D_x \frac{\sqrt{\sec x + 3}}{x\sqrt{x}}$
10. $\frac{d}{dt} \sqrt[4]{\sqrt[3]{t^2 + 1} + 1}$
11. $D_t(t^2 + -3t + 1)$
12. $D_x(\sqrt[3]{x}(1 + 2x))$
13. $\frac{d}{d\theta} \frac{\theta}{\theta + 2}$
14. $f'(x)$ where $f(x) = \csc(3x + 2)$
15. $D_x(\sqrt[5]{x - 1})^3$
16. $\frac{d}{dt} \sin(\sin t)$
17. $D_x 27(3 + \frac{\pi}{16})^4$
18. $D_x(x\sqrt[5]{x + 1} \cot(x))$
19. $D_x \cos\left(\frac{1}{x - 1}\right)$
20. $\frac{d}{dx} \frac{x^2}{1 + \frac{1}{x}}$
21. $D_x(3x^5 + x^2 + 3x + 1)$
22. $D_x((x^2 + 1) \sin x)$
23. $\frac{d}{d\theta} \frac{\theta}{\tan \theta + 10}$
24. $f'(x)$ where $f(x) = \sec(2x + 3)$
25. $D_x \sin(\sqrt[4]{3x - 1})$
26. $\frac{d}{dt} \tan(\sin t)$
27. $D_x \sin\left(\frac{2\pi}{17n}\right)$ where n is a fixed positive integer.
28. $D_x(x \sec(x) \tan^2 x)$
29. $D_x \frac{\csc^2(3x + 1) + 1}{x\sqrt{x}}$
30. $\frac{d}{dx} ((1 + \sin x)^2 + \sin x)^2$
31. $D_x(x^3 + x^2 - 3x + 1)$
32. $D_x(\sqrt{x} \sin x)$
33. $\frac{d}{d\theta} \frac{\theta}{\theta^2 + 10}$
34. $f'(x)$ where $f(x) = \cot(3x + 2)$
35. $D_x \sqrt[4]{(3x^2 - 1)^3}$
36. $\frac{d}{dt} \sin(\tan t)$

37. $D_x 27\left(3 + \frac{1}{5}\right)^\pi$
38. $D_x(x \cos(2x) \sin(x))$
39. $D_x \sin\left(\frac{x}{x+1}\right)$
40. $\frac{d}{dx} \frac{1}{1 + \frac{1}{x}}$
41. $D_x(x^3 + 2x^2 - 3x + 1)$
42. $D_x(x^3 \sin x)$
43. $\frac{d}{d\theta} \frac{\theta}{\sin \theta + 1}$
44. $f'(x)$ where $f(x) = \csc(x^3 + 2x - 1)$
45. $D_x \sin\left(\sqrt[3]{x^2 - 1}\right)$
46. $\frac{d}{dt} \tan(\sec t)$
47. $D_x \frac{\sin(14.3\pi)}{\log(2.13e^3)}$
48. $D_x(x \sin(x) \cos(x))$
49. $D_x \frac{\sqrt{x+3}}{x\sqrt{x}}$
50. $\frac{d}{dx} \sqrt[4]{\sqrt[3]{5x^2 + 1} - 1}$
51. $D_u(u^2 - 2u + 1)$
52. $D_x(x\sqrt[4]{x-1})$
53. $\frac{d}{d\theta} \frac{\theta}{\theta^2 + 2}$
54. $f'(x)$ where $f(x) = \sec(2x + 1)$
55. $D_x \left(\sqrt[5]{3x^2 - 1}\right)^4$
56. $\frac{d}{dt} \tan(\tan t)$
57. $D_x 27\left(3 + \frac{\pi}{16}\right)^4 x$
58. $D_x(x^3 \sqrt[5]{x+1})$
59. $D_x \csc^2\left(\frac{x}{x-1}\right)$
60. $\frac{d}{dx} \frac{x^2}{1 + \frac{1}{x}}$
61. $D_w(w^4 + 8w^2 - 2w + 1)$
62. $D_x(x\sqrt[5]{x^2 - 1})$
63. $\frac{d}{d\theta} \frac{\theta}{\sin \theta + 2}$
64. $f'(x)$ where $f(x) = \cot(2x + 1)$
65. $D_x \left(\sqrt[5]{\sin(x^3) - 1}\right)^4$
66. $\frac{d}{dt} \tan(\tan t)$
67. $D_x \left[27\left(3 + \frac{\pi}{e}\right)^{3.14159}\right]$
68. $D_x(x\sqrt[4]{x^2 + 1} \sin x)$
69. $D_x \csc^2\left(\frac{1}{x+1}\right)$
70. $\frac{d}{dw} \frac{w^2}{w + \frac{2}{w}}$