Find the derivative of each of the following functions by using the chain rule.

1. $(\csc(x))^{20}$
2. $(9x+3)^{20}$
3. $-\cos\left(\sqrt{9x}\right)$
4. $\frac{1}{-10x^2+10x+2}$
5. $-\sin\left(9x^3+21\right)$
6. $\sin\left(\sin(x)\right)$
7. $-\sin\left(-\sin(x)\right)$
8. $\cot\left(-8x\right)$
9. $\cos\left(\sec(x)\right)$
10. $\sqrt[11]{-\cos(x)}$
11. $\cos\left(9x^2+14x+6\right)$
12. $\sqrt[16]{9x^3+21}$
13. $(\cos(x))^{2008}$
14. $(\csc(x))^{2008}$
15. $\frac{1}{e^{2x}}$
16. $\sqrt{e^{8x}}$
17. $(\sin(x))^{2008}$
18. $-\sin\left(5x^3+11\right)$
19. $\cos\left(\cot(x)\right)$
20. $\sin\left(\cot(x)\right)$
21. 2^{-5x+2}
22. $\sqrt[16]{-\cos(x)}$
23. $\sin\left(e^{2x}\right)$
24. $-\sin\left(\sec(x)\right)$
25. $-\cos\left(\cos(x)\right)$
26. $e^{15\csc(5x)}$
27. $(12x+5)^{17}$
28. $(\tan(x))^{20}$
29. $\tan\left(\sec(x)\right)$
30. e^{-9x}
31. 2^{6x^3+8}
32. $-\cos\left(\sqrt{8x}\right)$
33. $-\cos\left(e^{x}\right)$
34. $\cot\left(\sin(x)\right)$
35. $\cot\left(8\csc(8x)\right)$
36. $2^{\sqrt{x}}$
37. $\frac{1}{-8x}$
38. $\sqrt[9]{\csc(x)}$
39. $\sqrt[16]{\sec(x)}$
40. $\sqrt[11]{\sec(x)}$
41. $-\sin\left(9x^2+14x+6\right)$
42. $\sqrt[16]{-\sin(x)}$
43. $\tan\left(\cos(x)\right)$
44. $(\sin(x))^{17}$
45. $\sqrt[15]{\csc(x)}$
46. $\sqrt[9]{-\sin(x)}$
47. $\tan\left(\sqrt{x}\right)$
48. $\sqrt[15]{-\cos(x)}$
49. $2^{\sqrt{9x}}$
50. $\sqrt{6x^3+8}$
51. $2^{\sin(x)}$
52. $\sqrt[9]{9x^2+14x+6}$
53. $\sqrt[3]{\sec(x)}$
54. $(\tan(x))^{100}$
55. $\sqrt[12]{\csc(x)}$
56. e^{5x^3+11}
57. $\sqrt[3]{9x^2+14x+6}$
58. $\cot\left(\csc(x)\right)$
59. $(\cot(x))^{2008}$
60. $\frac{1}{9x^2+14x+6}$

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