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

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