

Homework for Day 5, Session 1

Find the first derivative of each function.

1. $h(z) = e^{\sin z}$

5. $K(n) = e^{n^3}$

2. $f(x) = \sin(e^{2x})$

6. $f(r) = -2\cos(6x^2)$

3. $W(r) = \ln(\sin r)$

7. $f(q) = \sin(e^{q^4})$

4. $f(r) = \cos(\ln r)$

8. $N(t) = (t^2 + 3t - 9)^5$

AP Physics Prep
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9. $g(z) = \sin(5z - 9)$

11. $F(x) = \frac{1}{x^2 - 9}$

10. $r(t) = \ln(t^4 - 9142)$

12. $F(t) = \frac{1}{\sin^2(t^2 - 9)}$

Take both the first and second derivative of the following functions

13. $f(x) = \frac{9}{2}x^4 - 5x^2 + 10x^{-2}$

14. $K(x) = (2x - 1)^{10}$

15. $r(t) = \ln(3t - 9)$