

Name: _____
Group Members Present:

Grade: _____

_____, _____, & _____

Write the derivative formula for each function.

1. $y = 16(0.2^x)$

2. $h(t) = 5 \ln t$

3. $y = 3 \ln x + \sqrt{2}x$

4. $g(x) = \frac{2}{5}x^5 - 3 \ln x$

5. $f(x) = 2x^{-9} + 4e^x$

6. $f(t) = 3(8^t)$

7. $y = 24 \ln x + 6e^x$

8. $g(t) = 3\sqrt{t} - 5(2^t)$

9. $y = 12e^x - x^{\sqrt{2}}$

10. $g(t) = 0.3^t + 72.8$

11. $p(z) = 5.78^z - \frac{9}{z}$

12. $y = 14e^x$

13. $f(v) = 3e^v + \frac{2}{3}(v-1)$

14. $h(x) = e^x + 5$

15. $h(z) = 3e^9 - \frac{2}{3}(e^z + z^5)$

16. $y(w) = 2.3^w + 208w$ hits for w websites

17. $g(t) = \frac{3}{t^2} - \ln t$ gallons in t hours

18. $P(x) = 93.2x^2 + 7.53^x$ thousand dollars x years after 1990