

Name: _____ Score: _____

Teacher: _____ Date: _____

Derivative – Exponential and logarithmic functions

For questions 1 – 12 find the derivative of the following functions.

1. $f(x) = 2e^x - 8^x$

2. $f(x) = 4\log_3(x) - \ln(x)$

3. $g(x) = 3^x \log(x)$

4. $f(x) = x^5 - e^x \ln(x)$

5. $h(y) = \frac{y}{1-e^y}$

6. $f(x) = \frac{1+5x}{\ln(x)}$



7. $f(x) = 3^{x^2}$

8. $s(t) = \frac{\sin(t)}{e^t}$

9. $y = \sin(e^x)$

10. $v(t) = e^{\sin(t)}$

11. $f(x) = \ln(\cos(x))$

12. $f(x) = \frac{\sqrt{\ln(x^2)}}{x}$