

Name: _____

Worksheet on e and ln

Find the Derivative.

1. $Y = e^{1-x}$

2. $Y = e^{-x^2}$

3. $Y = x^2 e^{-x}$

4. $Y = e^{-3/t^2}$

5. $Y = \ln\left(\frac{1+e^x}{1-e^x}\right)$

6. $Y = \ln \frac{e^x + e^{-x}}{2}$

7. $Y = xe^x - e^x$

8. $Y = e^3 \ln x$

9. $Y = \ln x^2$

10. $y = \ln(x\sqrt{x^2-1})$

11. $y = \ln(\ln x)$

12. $y = \ln \sqrt{1+\sin^2 x}$

13. $y = \frac{\ln t}{t^2}$

13. $y = \ln \frac{x}{x^2+1}$