

Name: _____

Calculus

Derivative Progression E: e and ln

Find the derivative of each function ($\frac{dy}{dx}$)

1) $y = 5x + \frac{1}{x} - 5 + \pi$

9) $y = e^{\ln x}$

2) $y = e^x$

10) $y = \ln 2$

3) $y = \pi e^x$

11) $y = e^{\sin x}$

4) $y = \ln x$

12) $y = \sin(e^x)$

5) $y = 5 \ln x$

13) $y = \cos(e^{x^2})$

6) $y = \ln x^5$

14) $y = \ln(\cos x)$

7) $y = e^{x^2}$

15) $y = \tan(\ln x^3)$

8) $y = e^{5x}$

16) $y = \sin^p(e^{nx} + \ln 5)$