

Derivatives of the family  $\frac{1}{x}$

1.  $y = \frac{5}{x^4}$

2.  $y = \frac{x^4}{5}$

3.  $y = \sin\left(\frac{4}{x^2}\right)$

4.  $y = \sin\left(\frac{x^4}{4}\right)$

5.  $y = \sec\left(\frac{2}{x}\right)$

6.  $y = \sec\left(\frac{x}{2}\right)$

7.  $y = \tan^{-1}\left(\frac{4}{x^8}\right)$

8.  $y = \tan^{-1}\left(\frac{x^8}{4}\right)$

9.  $y = e^{\frac{3}{x}}$

10.  $y = 2^{\frac{3}{x^2}}$

11.  $y = \ln\left(\frac{1}{x}\right)$

12.  $y = \log_4\left(\frac{2}{x}\right)$