

## MCS22 Homework 19

Find the derivative of each function.

1.  $f(x) = e^{5x}$

2.  $f(x) = xe^{4x}$

3.  $f(x) = e^{\sqrt{x}}$

4.  $f(x) = x^2e^{2x}$

5.  $f(x) = \frac{2e^x}{x^2 + 3}$

6.  $f(x) = (e^{4x-3})^2$

7.  $f(x) = (\sin x)e^{-x}$

8.  $f(x) = e^{\csc x}$