

MCS22 Homework 17

Find the derivative of each function.

1. $f(x) = 17^x$

2. $f(x) = 8^{2x}$

3. $f(x) = (\sqrt{5})^x$

4. $f(x) = \ln 2^x$

5. $f(x) = x^2 3^x$

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

7. $f(x) = \ln(x\sqrt{2})$

8. $f(x) = (x^4 - 4^x)^{10}$

9. $f(x) = 5^{x \cos x}$

10. $f(x) = \ln e^x$

11. $f(x) = \ln(3x\sqrt{3+x})$

12. $f(x) = \pi^{4^x}$