More Differentiation Practice

Determine the derivative of the following functions:

1. $f(x) = 4^x$

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

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

4. $f(x) = 17 + 42\sqrt{x} - 9^x$

5. $f(x) = \pi^x + x^\pi + e^x + e^\pi + \pi^e + x^\pi$

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

7. $f(x) = xe^x$

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