1. $f(x) = (3x^2 + 1)^4$

2. $f(x) = \sqrt{5x - 7}$ (Hint: rewrite as $(5x - 7)^{1/2}$)

3. $f(x) = \dfrac{1}{(2x + 9)^3}$ (Hint: rewrite as $(2x + 9)^{-3}$)

4. $f(x) = (x^2 - 5x + 6)^5$

5. $f(x) = e^{2x^3 + 7}$

6. $f(x) = e^{(x+1)^2}$

7. $f(x) = e^{\sqrt{x}}$ (Hint: rewrite as $e^{x^{1/2}}$)

8. $f(x) = \ln(4x^2 + 1)$

9. $f(x) = \ln\left(\sqrt{2x + 3}\right)$

10. $f(x) = \ln\left(\dfrac{1}{x^2 + 1}\right)$