

# Math 182 Honors Quiz 1

Differentiate:

$$\textcircled{1} \quad \frac{d}{dx} (x^3 + 4x^2 + 7) =$$

$$\textcircled{2} \quad \frac{d}{dx} \left( \frac{x^2 - 1}{x^2 + 1} \right) =$$

$$\textcircled{3} \quad \frac{d}{dx} 2^x =$$

$$\textcircled{4} \quad \frac{d}{dx} \left( \frac{1}{x} + \sqrt{x} \right) =$$

$$\textcircled{5} \quad \frac{d}{dx} \left( x^2 \cos(x+7) \right) =$$

$$\textcircled{6} \quad \frac{d}{dx} \left( x^x \right) =$$