

Math 181 Quiz 8 Version A

1. State the following derivative rules from memory:

$$\frac{d}{dx} \arccos x = \boxed{}$$

$$\frac{d}{dx} \sec x = \boxed{}$$

$$\frac{d}{dx} \tan x = \boxed{}$$

$$\frac{d}{dx} \arcsin x = \boxed{}$$

$$\frac{d}{dx} \csc x = \boxed{}$$

$$\frac{d}{dx} \cot x = \boxed{}$$

$$\frac{d}{dx} \arctan x = \boxed{}$$

$$\frac{d}{dx} \log_{10} x = \boxed{}$$

$$\frac{d}{dx} 10^x = \boxed{}$$

2. Use the rules of calculus to compute the following derivatives:

(i) $\frac{d}{dx} \sec(x^2)$

(ii) $\frac{d}{dx} \frac{\arctan x}{x}$