

Find the following derivatives.

Don't worry about algebraic simplifications.

$$1. \frac{d}{dx}(\arcsin(x^2))$$

$$2. \frac{d}{dx}(\arcsin(2x))$$

$$3. \frac{d}{dx}(\arctan(4x))$$

$$4. \frac{d}{dx}(\arctan(\ln(x)))$$

$$5. \frac{d}{dx}(\arctan(\arcsin(x)))$$