

Full Name: _____

ID# _____

Ser# _____

Q1. Let $\tan(x - y) = \frac{y}{1+x^2}$. Find $\frac{dy}{dx}$.

Q2. A street light is mounted on top of a 5-meter-tall pole. A man 2m tall is walking away from the pole at a rate of 1.5m/s along a straight path. How fast is his shadow moving when he is 10m away from the pole?