PROBLEMA 10.12 Calcula $H'(x)$

a) $$H(x) = \int_3^{\left(\int_1^x \operatorname{sen}^3 t\, dt\right)} \frac{dt}{1 + t^2 + \operatorname{sen}^6(t)}$$

$$H'(x) = \frac{\operatorname{sen}^3(x)}{1 + \left(\int_1^x \operatorname{sen}^3 t\, dt\right)^2 + \operatorname{sen}^6\left(\int_1^x \operatorname{sen}^3 t\, dt\right)}$$

b) $$H(x) = \cos\left(\int_0^x \cos\left(\int_0^t \cos^3(s)\, ds\right) dt\right)$$

$$H'(x) = -\operatorname{sen}\left(\int_0^x \cos\left(\int_0^t \cos^3(s)\, ds\right) dt\right) \cdot \left(\cos\left(\int_0^x \cos^3(s)\, ds\right)\right)$$