PF – CÁLCULO A UMA VARIÁVEL

1) Calcule o limite $\lim\limits_{x \to 1} \dfrac{\sqrt[3]{x+7}-2}{\sqrt{x+8}-3}$

2) Calcule as derivadas

   a) $f(x) = \sec\left(\dfrac{4x^2+2}{\ln x \cos x}\right)$

   b) $f(x) = \dfrac{\sqrt{(x+1)(x-1)}}{e^{1-x^2}}$

3) Calcule as integrais

   a) $\int \dfrac{dx}{x(\ln x)^2}$

   b) $\int \dfrac{1+x}{1+x^2}\,dx$