

**Resultat zu 4.2:** a)  $f'(x) = -\sin x e^{\cos x}$

b)  $f'(x) = 2x 2^x + \ln(2) x^2 2^x .$

c)  $f'(x) = \frac{\sqrt{\ln(x)} - \frac{x}{2x\sqrt{\ln(x)}}}{\ln x}$