(1)

$$\begin{aligned} g(t) &= \sin(t)\arcsin(t) \\ \frac{d[g(t)]}{dt} &= \cos(t)\arcsin(t) + \frac{\sin(t)}{\sqrt{1-t^2}} \end{aligned}$$

(2)

$$\begin{aligned} h(l) &= l^2 \\ \frac{d[h(l)]}{dl} &= 2l \end{aligned}$$

(3)

$$\begin{aligned} f(x,t) &= -3x + \tan(\cos(t)) \\ \nabla f(x,t) &= \begin{bmatrix} -3 \\ -\left(\tan^2(\cos(t)) + 1\right)\sin(t) \end{bmatrix} \end{aligned}$$