Cvičenie 4

1. Vypočítajte $\boldsymbol{t}$, $\boldsymbol{n}$, $\boldsymbol{b}$, k, κ pre uvedené krivky

   (a) $P(t) = (e^t \cos t, e^t \sin t, e^t)$

   (b) $P(t) = (\cosh t, \sinh t, t)$

   (c) $P(t) = (t - \sin t \cos t, \sin^2 t, \cos t)$, $0 < t < \pi$

   (d) $P(t) = (\sqrt{1+t^2}, t, \ln(t + \sqrt{1+t^2}))$

   (e) $P(s) = (\frac{1}{3}(1+s)^{\frac{3}{2}}, \frac{1}{3}(1+s)^{\frac{3}{2}}, \frac{1}{\sqrt{2}}s)$, $-1 < s < 1$

   (f) $P(t) = (t, t^2/2, t\sqrt{1+t^2} + \ln(t + \sqrt{1+t^2}))$

   (g) $P(t) = (\frac{1}{2}e^t(\sin t + \cos t), \frac{1}{2}e^t(\sin t - \cos t), e^t)$