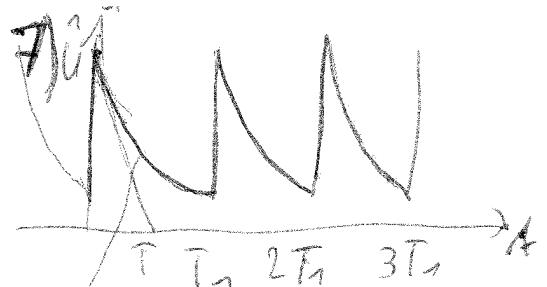


1) $h(\tau) = \mathcal{E}(a\tau - b)$

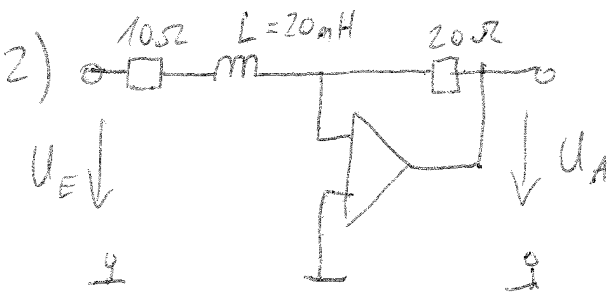
$u(\tau) = 0,5 \cdot e^{-\tau} \cdot \sin(\omega\tau) \mathcal{E}(\tau)$

$y_{0z} = ?$



~~u(t) = u - e^{-t} - \frac{A}{T}~~
 $u(t) = u - e^{-t} \quad 0 < t < T_1$

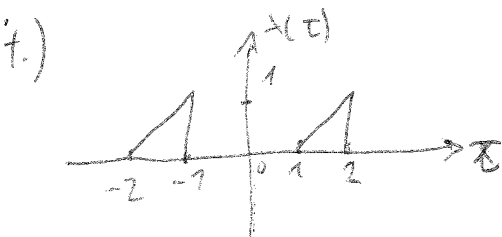
T_1 periodisch
 ges = kompl. Amplitude der Harmonischen



$T_B = 1 \text{ ms}$

3) $y' + 2y = 0,5u' + 3u$
 Sprungantwort?

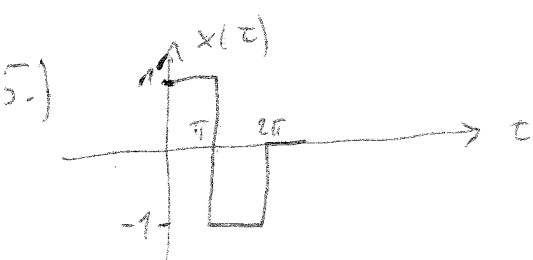
8) $x(\tau) = \frac{1}{\sqrt{\tau}}$ Hinweis: $u = \sqrt{s\tau}$
 $X(s) = ?$
 $\int_{-\infty}^{\infty} e^{-u^2} du = \sqrt{\pi}$



9) $G(s) = \frac{1 - e^{-s}}{s}$

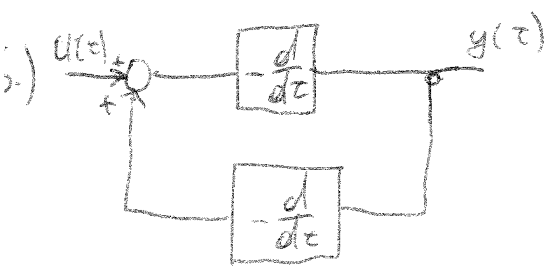
Ortskurve?
 $G(s)$ mittels Integrator, Laufzeitglied usw. darstellen
 Warum sieht das so aus?

Signalenergie?



10) $y'' + 2y' = 3u$

$A \approx ?$
 Transitionsmatrix mit Phasenvariablen als Zustandsgrößen
 Transitionsmatrix?



$\phi(\tau) = e^{\tilde{A}\tau} \cdot \mathcal{E}(\tau)$

Bode diagramm:
 Betragsgang + Frequenzgang