Magnitude and Phase of Complex Functions of Real Variables

$\left|e^{-(3+j2.3)}\right| =$ $\quad\quad$ $\measuredangle e^{-(3+j2.3)} =$

$\left|e^{(2-j6)}\right| =$ $\quad\quad$ $\measuredangle e^{(2-j6)} =$

$\left|\frac{100}{8+j13}\right| =$ $\quad\quad$ $\measuredangle \frac{100}{8+j13} =$

Fundamental Period of a Sum of Two Periodic Signals

$3\sin(220\pi t) - 8\cos(120\pi t),\ T_0 =$

$\delta_{14}[n] - 6\delta_8[n],\ N_0 =$

$-2\cos(3\pi n/12) + 11\cos(14\pi n/10),\ N_0 =$

Generalized Derivatives

$\mathrm{x}(t) = \begin{cases} 4 & , \ t < 3 \\ 7t & , \ t > 3 \end{cases}$, $\mathrm{x}'(t) =$

Impulses and Periodic Impulses

Sampling Property $\int_{-8}^{22} 8e^{4t}\delta(t-2)\,dt =$

$\int_{11}^{82} 3\sin(200t)\delta(t-7)\,dt =$

$\int_{-2}^{10} 39t^2\delta_4(t-1)\,dt =$

$\sum_{n=-18}^{33} 38n^2\delta[n+6] =$

$\sum_{n=-4}^{7} -12(0.4)^n\,\mathrm{u}[n]\delta_3[n] =$

Equivalence Property $7\delta(t+4)\times(2t^2+5t+1) =$

$27(0.3)^n\,\delta[n-3] =$

Scaling Property $5\delta(3(t-1)) =$

$-9\delta_{11}(5t) =$

$13\delta[3n] =$

$22\delta_3[4n] =$

Scaling and Shifting $A =$, $t_0 =$, $w =$

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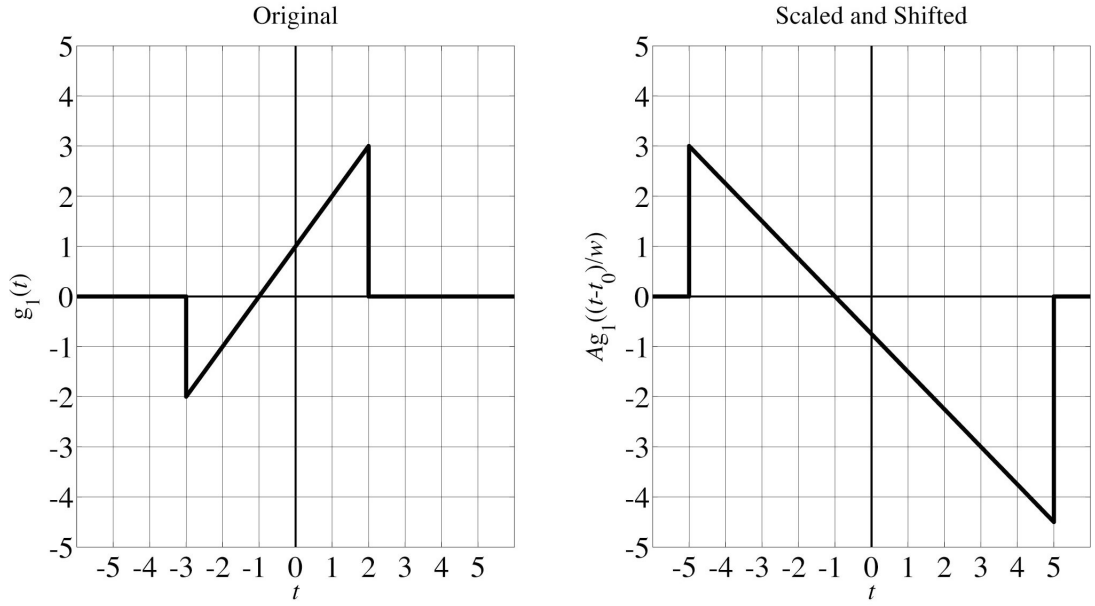

Even and Odd Functions

$$\mathrm{x}(t) = \frac{t^3 - 4t^2}{e^{j8t}}$$

$$\mathrm{x}_e(t) =$$

$$\mathrm{x}_o(t) =$$

Signal Energy and Signal Power

$$\mathrm{x}[n] = n(-1.3)^n \left(\mathrm{u}[n] - \mathrm{u}[n-4]\right)$$

$$E_{\mathrm{x}} =$$

$\mathrm{x}[n]$ is periodic and one period of $\mathrm{x}[n]$ is described by

$$\mathrm{x}[n] = n(1-n) \ , \ 3 \le n < 6$$

$$P_{\mathrm{x}} =$$

Signal Energy and Signal Power

$$\mathrm{x}(t)=\begin{cases}|t|-1\ , & |t|<1\\ 0 & , \text{otherwise}\end{cases}$$

$E_{\mathrm{x}}=$

$\mathrm{x}(t)$ is periodic and one period of $\mathrm{x}(t)$ is described by

$$\mathrm{x}(t)=t(1-t)\ , 1<t<5$$

$P_{\mathrm{x}}=$