CENTER FOR COMMUNICATIONS AND DIGITAL SIGNAL PROCESSING

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Subject: Errata for Digital Signal Processing, 3rd ed. (9th printing)

Page	Location	Currently	Should be	Corrected in Printing #
36	Fig. 1.21	thick line is incorrect at $t = 2T, 3T$		
103	eq. $(2.4.24)$	$C_N \lambda_n$	$C_N \lambda_N^n$	
228	Problem 3.52	$X(z) = \frac{(z - \frac{1}{2})^4}{(z = \frac{1}{3})^3}$	$X(z) = \frac{(z - \frac{1}{2})^4}{(z - \frac{1}{3})^3}$	
242	2nd row above eq. $(4.1.31)$	radian	radial	
326	Fig. 4.42	DC gain = 1	DC gain = 5	
399	2nd eq. above Sec. 5.1.2	$\frac{1 - a^N e^{-j\omega n}}{1 - ae^{-j\omega}}$	$\frac{1 - a^N e^{-j\omega N}}{1 - ae^{-j\omega}}$	
399	eq. above Sec. 5.1.2	$1 - ae^{-j2\pi kN}$	$1 - ae^{-j2\pi k/N}$	
409	eq. $(5.1.40)$	$e^{j2\pi kF_o}$	$e^{j2\pi kF_ot}$	
444	Problem 5.23(e)	$e^{j(2\pi/N)k_0}$	$e^{j(2\pi/N)k_0n}$	
482	eq. $(6.3.11)$	$z_k = re^{j2\pi kn/N}$	$z_k = re^{j2\pi k/N}$	
518	Example 7.2.3	$B_2(z) = \frac{1}{2} + \frac{3}{8}z^{-1} + z^{-1}$	$B_2(z) = \frac{1}{2} + \frac{3}{8}z^{-1} + z^{-2}$	
732	Problem 8.23	$\omega = 5\pi/12$	$\omega_l = 5\pi/12$	
732	Problem 8.23	$\omega = 7\pi/12$	$\omega_u = 7\pi/12$	
732	Problem 8.23	analog protoype	analog prototype	
732	Problem 8.23	H(s)	$H_a(s)$	

Page	Location	Currently	Should be	Corrected in Printing #
750	below eq. (9.2.1)	x_L	x_2	
785	2nd row above eq. (10.2.4)	$y(\mathrm{m})$	y(m)	
803	Example 10.5.1, solution, above equation	$h(\mathrm{n})$	h(n)	

General Comments

• The number of quantization cells (in Sec. 9.2.2) is denoted by L, so that the size of each cell (assuming uniform quantization) is R/L as stated in eq. (9.2.5), and shown in Fig. 9.7. **In contrast**, eq. (1.4.27) in Sec. 1.4 states that $\Delta = R/(L-1)$. This is misleading, as is also Fig. 1.20.