Prob. 1

Determine and sketch the even and odd parts of the signals depicted in Figure P1.23. Label your sketches carefully.

Figure P1.23
Prob. 2 A continuous-time signal $x(t)$ is shown in Figure P1.21. Sketch and label carefully each of the following signals:
(a) $x(t - 1)$  (b) $x(2 - t)$  (c) $x(2t + 1)$  (d) $x(4 - \frac{t}{2})$
Prob. 3: A discrete-time signal is shown in Figure P1.22. Sketch and label carefully each of the following signals:
(a) $x[n - 4]$  
(b) $x[3 - n]$  
(c) $x[3n]$  
(d) $x[3n + 1]$

Prob. 4: Determine the Fourier series representation for $x(t)$. 
Prob. 5: Signal Processing First, 2.7 (confirm with MATLAB)
Prob. 6: Signal Processing First, 2.8 (plot with MATLAB)
Prob. 7: Signal Processing First, 2.9
Prob. 8: Signal Processing First, 2.16
Prob. 9: Signal Processing First, 3.2
Prob. 10: Signal Processing First, 3.8
Prob. 11: Signal Processing First, 3.12
Prob. 12: Signal Processing First, 3.19

Bonus: Implement Lab C-1.3 on p. 460 of Signal Processing First.