

### Practice Problems on Fourier Series

- Textbook: 3.9; 3.27; 3.28c,d
- Use the result from 3.22c to determine the FS for

$$x(t) = \begin{cases} 0 & 0 \leq t \leq 2 \\ \sin(\pi t) & 2 < t \leq 4 \end{cases}$$

for  $T = 4$ . Use the time-shift property and verify your result using the linearity property.  
Hint: What do this signal and the original signal in 3.22c add up to?