

* Examples of computing the FS coefficients

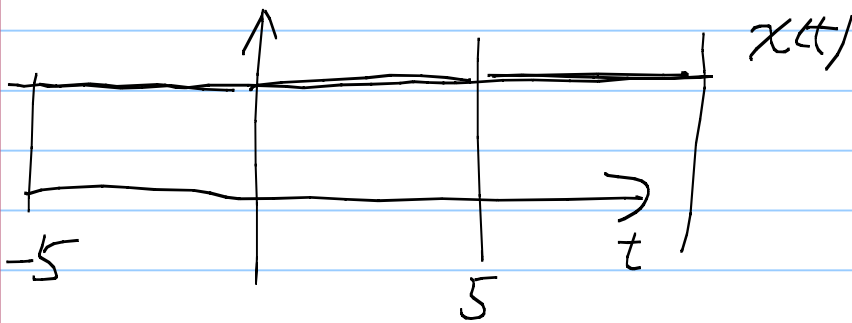
Method #1: by inspection Method #2: by direct computation

Example 1: (Solved by inspection)

$x(t)$ is of period 5.

$$x(t) = \begin{cases} 3 & \text{if } 0 \leq t < 5 \end{cases}$$

& $x(t)$ is periodic w. period 5



Q: Compute the FS coeff of $x(t)$.

Ans:

Example 2: (Solved by inspection)

$x(t) = \cos\left(\frac{2\pi}{5}t\right) + 1$. Q: Find its
FS representation.

Ans:

Example 3: $x(t) = \sin(3t) + 3\cos(2t + \frac{\pi}{4})$

Find its FS representation

Ans: