

$$\begin{aligned}
 &> a := n \rightarrow \frac{1}{\text{Pi}} \cdot (\text{int}((\text{Pi} + t) \cdot \cos(n \cdot t), t = -\text{Pi} .. 0) + \text{int}((\text{Pi} - t) \cdot \cos(n \cdot t), t = 0 .. \text{Pi})) \\
 &\quad a := n \rightarrow \frac{\int_{-\pi}^0 (\pi + t) \cos(n t) dt + \int_0^{\pi} (\pi - t) \cos(n t) dt}{\pi}
 \end{aligned} \tag{1}$$

$$\begin{aligned}
 &> b := n \rightarrow \frac{1}{\text{Pi}} \cdot (\text{int}((\text{Pi} + t) \cdot \sin(n \cdot t), t = -\text{Pi} .. 0) + \text{int}((\text{Pi} - t) \cdot \sin(n \cdot t), t = 0 .. \text{Pi})) \\
 &\quad b := n \rightarrow \frac{\int_{-\pi}^0 (\pi + t) \sin(n t) dt + \int_0^{\pi} (\pi - t) \sin(n t) dt}{\pi}
 \end{aligned} \tag{2}$$

$$\begin{aligned}
 &> \text{fourierSum} := \text{sum}(a(n) \cdot \cos(n \cdot t) + b(n) \cdot \sin(n \cdot t), n = 1 .. 10) \\
 &\quad \text{fourierSum} := \frac{4 \cos(t)}{\pi} + \frac{4}{9} \frac{\cos(3 t)}{\pi} + \frac{4}{25} \frac{\cos(5 t)}{\pi} + \frac{4}{49} \frac{\cos(7 t)}{\pi} + \frac{4}{81} \frac{\cos(9 t)}{\pi}
 \end{aligned} \tag{3}$$

$$\begin{aligned}
 &> \text{fourierSuma} := \text{Sum}(a(n) \cdot \cos(n \cdot t) + b(n) \cdot \sin(n \cdot t), n = 1 .. 100) \\
 &\quad \text{fourierSuma} := \sum_{n=1}^{100} \left(-\frac{2(-1 + \cos(\pi n)) \cos(n t)}{\pi n^2} \right)
 \end{aligned} \tag{4}$$

$$> \text{plot}(\text{fourierSum}, t = -4 \cdot \text{Pi} .. 4 \cdot \text{Pi})$$

