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[> restart : with(LinearAlgebra) : with(plots) : with(plottools) : with(inttrans) :
  with(VectorCalculus) : SetCoordinates('cartesian'[x, y, z]) :
[> f := piecewise(0 < x and x < Pi,  $\frac{\text{Pi}}{4}$ , -Pi < x and x < 0,  $-\frac{\text{Pi}}{4}$ )
                                     
$$f := \begin{cases} \frac{\pi}{4} & 0 < x < \pi \\ -\frac{\pi}{4} & -\pi < x < 0 \end{cases}$$

[> b_n := n →  $\frac{1}{\text{Pi}}$  · int(f · sin(n · t), t = -Pi .. Pi) :
[>
[>

```

(1)