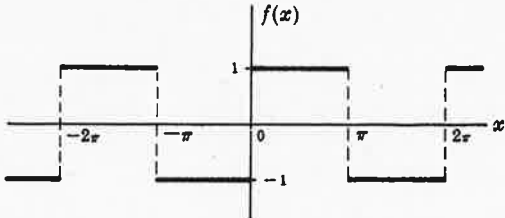
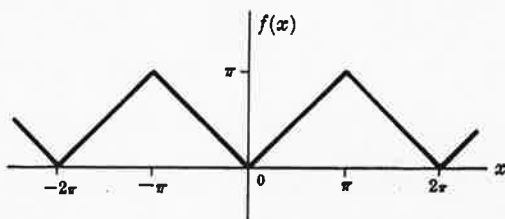
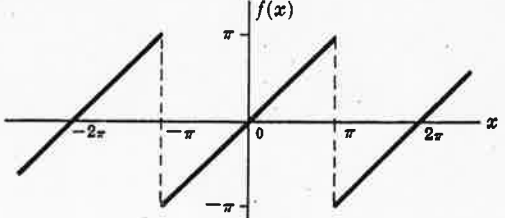
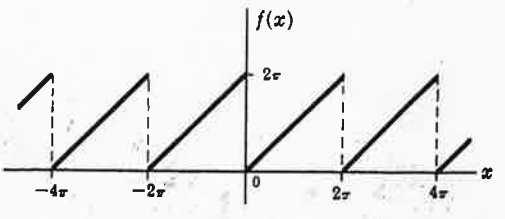
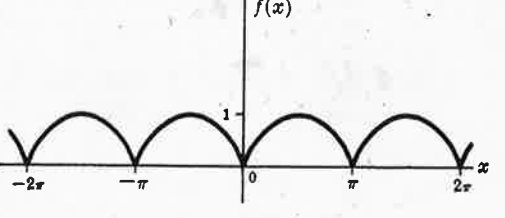
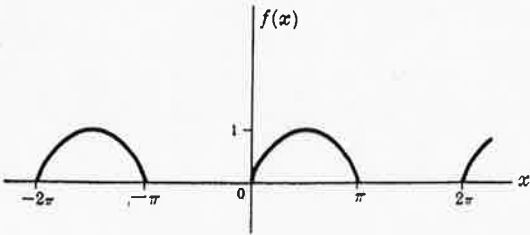
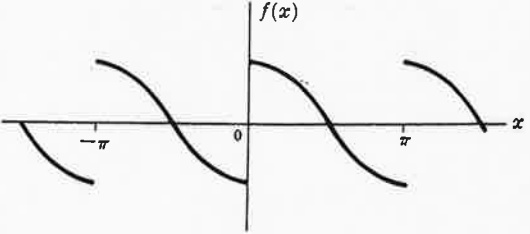
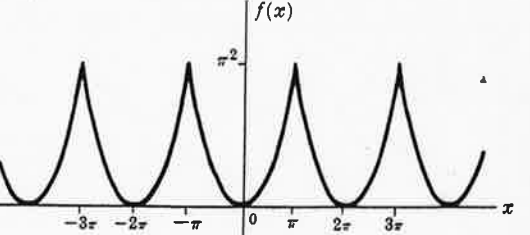
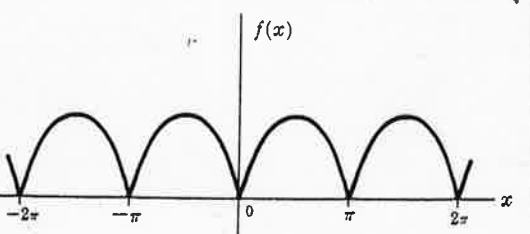
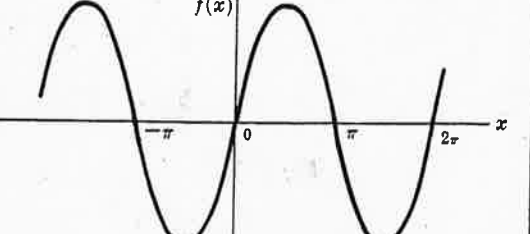


APPENDICE B

Séries de Fourier remarquables

B-1 $f(x) = \begin{cases} 1 & 0 < x < \pi \\ -1 & -\pi < x < 0 \end{cases}$ $\frac{4}{\pi} \left(\frac{\sin x}{1} + \frac{\sin 3x}{3} + \frac{\sin 5x}{5} + \dots \right)$	 Fig. B-1
B-2 $f(x) = x = \begin{cases} x & 0 < x < \pi \\ -x & -\pi < x < 0 \end{cases}$ $\frac{\pi}{2} - \frac{4}{\pi} \left(\frac{\cos x}{1^2} + \frac{\cos 3x}{3^2} + \frac{\cos 5x}{5^2} + \dots \right)$	 Fig. B-2
B-3 $f(x) = x, -\pi < x < \pi$ $2 \left(\frac{\sin x}{1} - \frac{\sin 2x}{2} + \frac{\sin 3x}{3} - \dots \right)$	 Fig. B-3
B-4 $f(x) = x, 0 < x < 2\pi$ $\pi - 2 \left(\frac{\sin x}{1} + \frac{\sin 2x}{2} + \frac{\sin 3x}{3} + \dots \right)$	 Fig. B-4
B-5 $f(x) = \sin x , -\pi < x < \pi$ $\frac{2}{\pi} - \frac{4}{\pi} \left(\frac{\cos 2x}{1 \cdot 3} + \frac{\cos 4x}{3 \cdot 5} + \frac{\cos 6x}{5 \cdot 7} + \dots \right)$	 Fig. B-5

B-6 $f(x) = \begin{cases} \sin x & 0 < x < \pi \\ 0 & \pi < x < 2\pi \end{cases}$	 Fig. B-6
$\frac{1}{\pi} + \frac{1}{2} \sin x - \frac{2}{\pi} \left(\frac{\cos 2x}{1 \cdot 3} + \frac{\cos 4x}{3 \cdot 5} + \frac{\cos 6x}{5 \cdot 7} + \dots \right)$	
B-7 $f(x) = \begin{cases} \cos x & 0 < x < \pi \\ -\cos x & -\pi < x < 0 \end{cases}$	 Fig. B-7
$\frac{8}{\pi} \left(\frac{\sin 2x}{1 \cdot 3} + \frac{2 \sin 4x}{3 \cdot 5} + \frac{3 \sin 6x}{5 \cdot 7} + \dots \right)$	
B-8 $f(x) = x^2, -\pi < x < \pi$	 Fig. B-8
$\frac{\pi^2}{3} - 4 \left(\frac{\cos x}{1^2} - \frac{\cos 2x}{2^2} + \frac{\cos 3x}{3^2} - \dots \right)$	
B-9 $f(x) = x(\pi - x), 0 < x < \pi$	 Fig. B-9
$\frac{\pi^2}{6} - \left(\frac{\cos 2x}{1^2} + \frac{\cos 4x}{2^2} + \frac{\cos 6x}{3^2} + \dots \right)$	
B-10 $f(x) = x(\pi - x)(\pi + x), -\pi < x < \pi$	 Fig. B-10
$12 \left(\frac{\sin x}{1^3} - \frac{\sin 2x}{2^3} + \frac{\sin 3x}{3^3} - \dots \right)$	