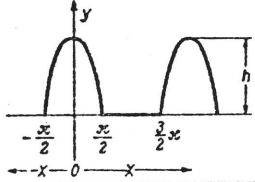
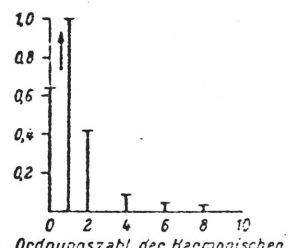
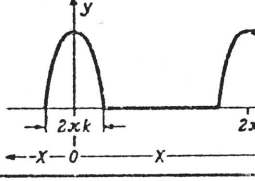
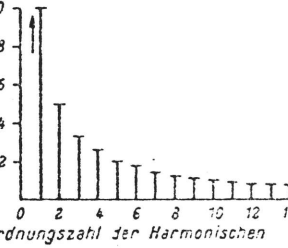
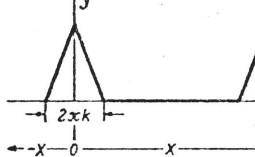
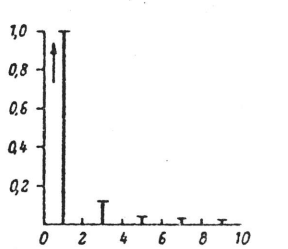
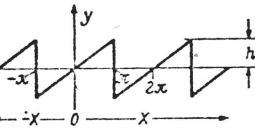
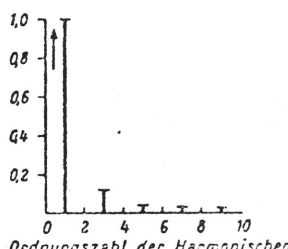
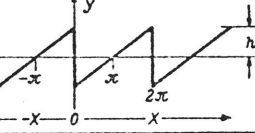
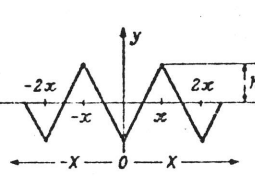
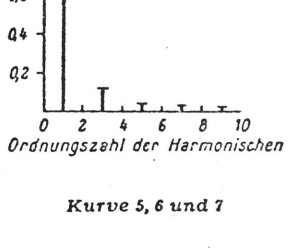
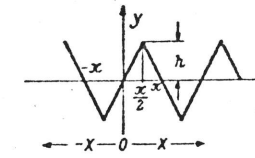
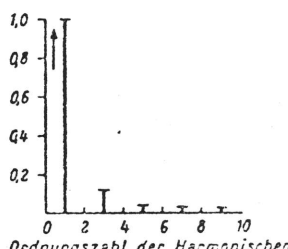
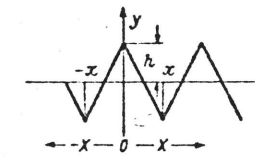
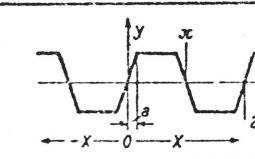
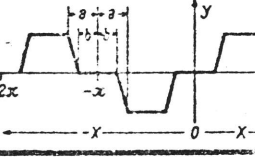


Beispiele für Fourier-Zerlegungen anderer periodischer Funktionen:

Kurvenverlauf	Gleichung	Oberwellenaufbau
<p>14</p> 	<p>Halbwellen einer cos- Schwingung</p> $f(x) = \frac{h}{\pi} + \frac{h}{2} \cos x + \frac{2h}{\pi} \left( \frac{\cos 2x}{1 \cdot 3} - \frac{\cos 4x}{3 \cdot 5} + \frac{\cos 6x}{5 \cdot 7} - \dots \right)$	 <p>Kurve 14</p>
<p>15</p> 	<p>Halbwellen einer cos- Schwingung</p> $f(x) = \frac{2kh}{\pi} + \frac{4kh}{\pi} \sum_{n=1}^{\infty} \frac{\cos n\pi k}{1 - 4k^2 n^2} \cdot \cos nx$	 <p>Kurve 17 und 18</p>
<p>16</p> 	$f(x) = \frac{hk}{2} + \frac{2h}{\pi^2 k} \sum_{n=1}^{\infty} \frac{1 - \cos n\pi k}{n^2} \cdot \cos nx$	 <p>Kurve 5, 6 und 7</p>
<p>17</p> 	$f(x) = \frac{2h}{\pi} \left( \frac{\sin x}{1} - \frac{\sin 2x}{2} + \frac{\sin 3x}{3} - \frac{\sin 4x}{4} \right)$	 <p>Kurve 10 bei a = π/4</p>
<p>18</p> 	$f(x) = -\frac{2h}{\pi} \left( \sin x + \frac{1}{2} \sin 2x + \frac{1}{3} \sin 3x \dots \right)$	
<p>5</p> 	$f(x) = -\frac{8h}{\pi^2} \left( \frac{\cos x}{1^2} + \frac{\cos 3x}{3^2} + \frac{\cos 5x}{5^2} \dots \right)$	 <p>Kurve 5, 6 und 7</p>
<p>6</p> 	$f(x) = \frac{8h}{\pi^2} \left( \sin x - \frac{\sin 3x}{3^2} + \frac{\sin 5x}{5^2} \dots \right)$	 <p>Kurve 10 bei a = π/4</p>
<p>7</p> 	$f(x) = \frac{8h}{\pi^2} \left( \cos x + \frac{\cos 3x}{3^2} + \frac{\cos 5x}{5^2} \dots \right)$	
<p>10</p> 	$f(x) = \frac{4h}{\pi} \cdot \left( \frac{\sin a}{1^2} \cdot \sin x + \frac{\sin 3a}{3^2} \cdot \sin 3x + \frac{\sin 5a}{5^2} \cdot \sin 5x \dots \right)$	
<p>11</p> 	$f(x) = \frac{4h}{\pi(a-b)} \left( \frac{\sin a - \sin b}{1^2} \sin x + \frac{\sin 3a - \sin 3b}{3^2} \sin 3x + \frac{\sin 5a - \sin 5b}{5^2} \sin 5x \dots \right)$	