

Gausskvadratur - punkter og vektor

Gauss-Legendre

n	x_i	A_i
2	$\pm\sqrt{\frac{1}{3}}$	1
3	0	$\frac{8}{9}$
	$\pm\sqrt{\frac{3}{5}}$	$\frac{5}{9}$
4	$\pm\sqrt{\frac{3}{7} - \frac{2}{7}\sqrt{\frac{6}{5}}}$	$\frac{18+\sqrt{30}}{36}$
	$\pm\sqrt{\frac{3}{7} + \frac{2}{7}\sqrt{\frac{6}{5}}}$	$\frac{18-\sqrt{30}}{36}$
5	0	$\frac{128}{225}$
5	$\pm\frac{1}{3}\sqrt{5 - 2\sqrt{\frac{10}{7}}}$	$\frac{322+13\sqrt{70}}{900}$
5	$\pm\frac{1}{3}\sqrt{5 + 2\sqrt{\frac{10}{7}}}$	$\frac{322-13\sqrt{70}}{900}$

Gauss-Lobatto

n	x_i	A_i
3	0	$\frac{4}{3}$
	± 1	$\frac{1}{3}$
4	$\pm\sqrt{\frac{1}{5}}$	$\frac{5}{6}$
	± 1	$\frac{1}{6}$
5	0	$\frac{32}{45}$
	$\pm\sqrt{\frac{3}{7}}$	$\frac{49}{90}$
	± 1	$\frac{1}{10}$
6	$\pm\sqrt{\frac{1}{3} - \sqrt{\frac{2}{3\sqrt{7}}}}$	$\frac{14+\sqrt{7}}{30}$
	$\pm\sqrt{\frac{1}{3} + \sqrt{\frac{2}{3\sqrt{7}}}}$	$\frac{14-\sqrt{7}}{30}$
	± 1	$\frac{1}{15}$
7	0	$\frac{256}{525}$
	$\pm\sqrt{\frac{5}{11} - \frac{2}{11}\sqrt{\frac{5}{3}}}$	$\frac{124+7\sqrt{15}}{350}$
	$\pm\sqrt{\frac{5}{11} + \frac{2}{11}\sqrt{\frac{5}{3}}}$	$\frac{124-7\sqrt{15}}{350}$
	± 1	$\frac{1}{21}$