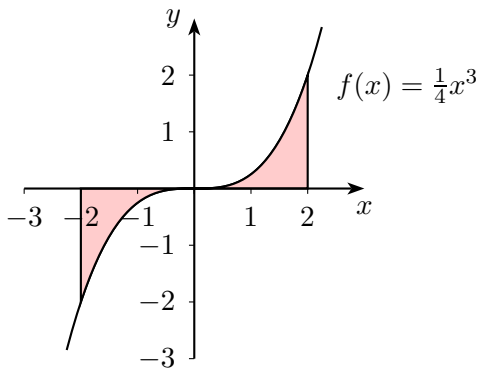
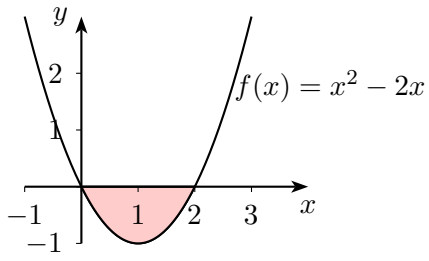
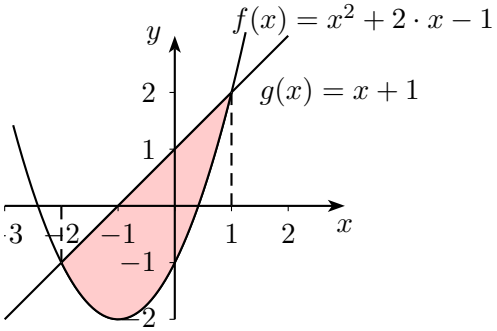
Mathematik • Torsten Warncke	
FOS 12c — Lösungen zu bestimmten Integralen Flächen — LÖSUNGEN	*Datum* *11. Februar 2009*



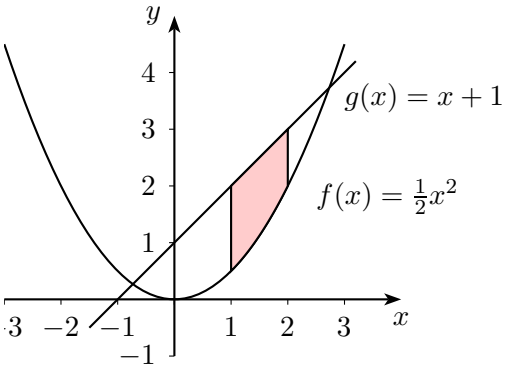
$A = 2 \cdot [\frac{1}{16}x^4]_0^2 = 2$



Nullstellen bei $x_1 = 0$ und $x_2 = 2$,
$A = -\int_0^2 f = \left[x^2 - \frac{x^3}{3}\right]_0^2 = \frac{4}{3} \approx 1{,}33.$



Schnittpunkte der beiden Funktionen bei $x = -2$ und $x = 1$.
$A = \int_{-2}^{1} (g(x) - f(x))\,dx =$
$\left[\frac{x^2}{2} + x - (\frac{x^3}{3} + x^2 - x)\right]_{-2}^{1} = 4\frac{1}{2} = 4{,}5$



$A = \int_1^2 (g - f) = \frac{4}{3} \approx 1{,}33.$

http://www.warncke-family.de/fos/int_2_lsg.pdf