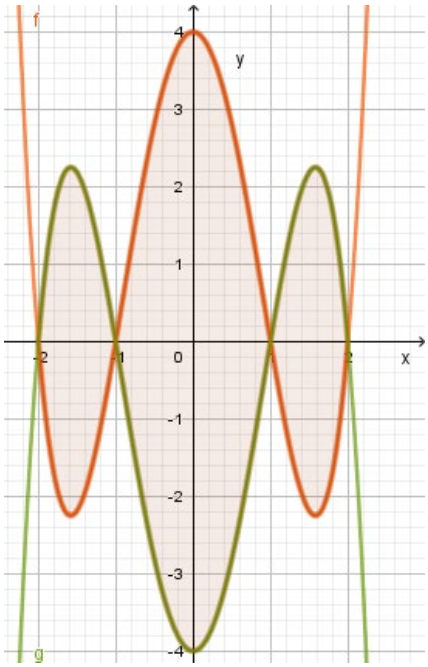
Lösungswege 8 – Online — Arbeitsblatt

Thema: Flächeninhalt zwischen f und g - Maturaformate		**Grundkompetenz:** AN-R 4.3
Name:	**Schwierigkeitsgrad:** mittel	**Klasse:**

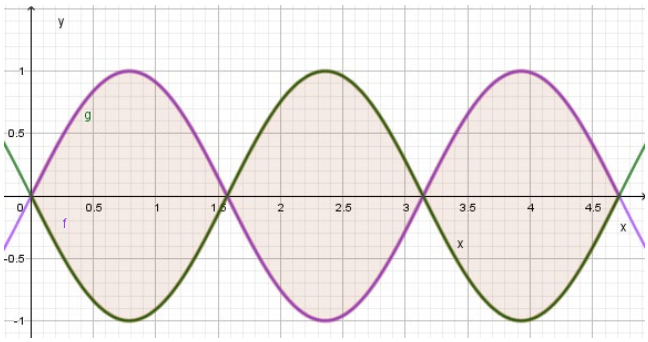
Gegeben sind die Graphen zweier Funktionen f und g. Kreuze jene beiden Rechenausdrücke an, mit denen man den markierten Flächeninhalt A zwischen den beiden Funktionsgraphen ermitteln kann.

a)



A	$A = 2 \cdot \int_{-2}^{-1}[f(x) - g(x)]dx + \int_{-1}^{1}[g(x) - f(x)]dx$	☐
B	$A = \int_{-2}^{-1}[g(x) - f(x)]dx + \int_{-1}^{1}[g(x) - f(x)]dx + \int_{1}^{2}[f(x) - g(x)]dx$	☐
C	$A = \int_{-2}^{2}[g(x) - f(x)]dx$	☐
D	$A = \int_{-2}^{-1}[g(x) - f(x)]dx - \int_{-1}^{1}[g(x) - f(x)]dx - \int_{1}^{2}[f(x) - g(x)]dx$	☐
E	$A = \left\lvert\int_{-2}^{-1}[g(x) - f(x)]dx\right\rvert + \int_{-1}^{1}[f(x) - g(x)]dx + \int_{1}^{2}[g(x) - f(x)]dx$	☐

b)



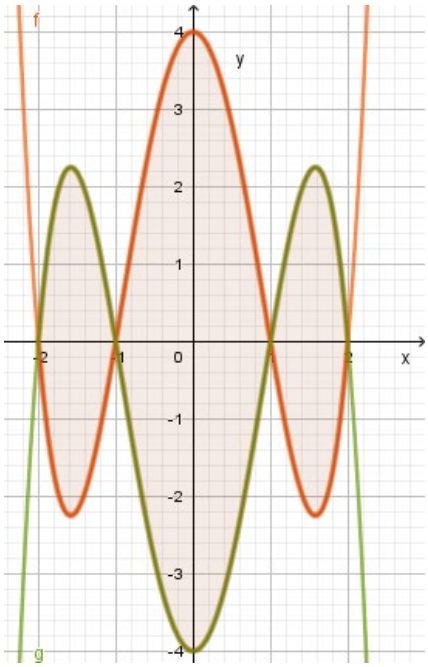
A	$A = \int_{0}^{0,5\pi}[g(x) - f(x)]dx - \int_{0,5\pi}^{\pi}[g(x) - f(x)]dx + \int_{\pi}^{1,5\pi}[f(x) - g(x)]dx$	☐
B	$A = 2 \cdot \int_{0}^{0,5\,\pi}[g(x) - f(x)]dx + \int_{0,5\pi}^{\pi}[g(x) - f(x)]dx$	☐
C	$A = \int_{0}^{0,5\pi}[g(x) - f(x)]dx + \int_{0,5\pi}^{\pi}[g(x) - f(x)]dx + \int_{\pi}^{1,5\pi}[f(x) - g(x)]dx$	☐
D	$A = \int_{0}^{1,5\pi}[g(x) - f(x)]dx$	☐
E	$A = \int_{0}^{0,5\pi}[g(x) - f(x)]dx + \int_{0,5\pi}^{\pi}[f(x) - g(x)]dx + \int_{\pi}^{1,5\pi}[g(x) - f(x)]dx$	☐

Lösungswege 8 – Online — Arbeitsblatt

Thema: Flächeninhalt zwischen f und g - Maturaformate - Lösungen		**Grundkompetenz:** AN-R 4.3
Name:	**Schwierigkeitsgrad:** mittel	**Klasse:**

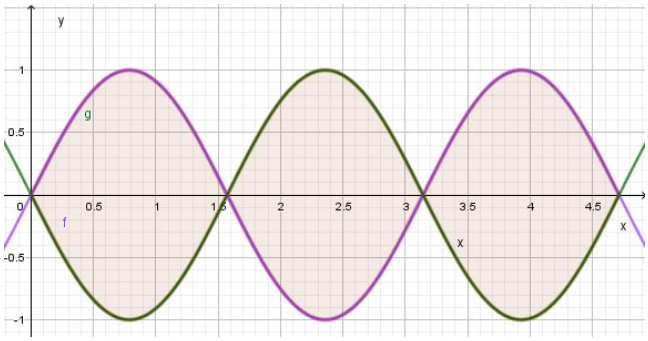
Gegeben sind die Graphen zweier Funktionen f und g. Kreuze jene beiden Rechenausdrücke an, mit denen man den markierten Flächeninhalt A zwischen den beiden Funktionsgraphen ermitteln kann.

a)



A	$A = 2 \cdot \int_{-2}^{-1}[f(x) - g(x)]dx + \int_{-1}^{1}[g(x) - f(x)]dx$	☐
B	$A = \int_{-2}^{-1}[g(x) - f(x)]dx + \int_{-1}^{1}[g(x) - f(x)]dx + \int_{1}^{2}[f(x) - g(x)]dx$	☐
C	$A = \int_{-2}^{2}[g(x) - f(x)]dx$	☐
D	$A = \int_{-2}^{-1}[g(x) - f(x)]dx - \int_{-1}^{1}[g(x) - f(x)]dx - \int_{1}^{2}[f(x) - g(x)]dx$	☒
E	$A = \left\lvert\int_{-2}^{-1}[g(x) - f(x)]dx\right\rvert + \int_{-1}^{1}[f(x) - g(x)]dx + \int_{1}^{2}[g(x) - f(x)]dx$	☒

b)



A	$A = \int_{0}^{0,5\pi}[g(x) - f(x)]dx - \int_{0,5\pi}^{\pi}[g(x) - f(x)]dx + \int_{\pi}^{1,5\pi}[f(x) - g(x)]dx$	☐
B	$A = 2 \cdot \int_{0}^{0,5\,\pi}[g(x) - f(x)]dx + \int_{0,5\pi}^{\pi}[g(x) - f(x)]dx$	☒
C	$A = \int_{0}^{0,5\pi}[g(x) - f(x)]dx + \int_{0,5\pi}^{\pi}[g(x) - f(x)]dx + \int_{\pi}^{1,5\pi}[f(x) - g(x)]dx$	☐
D	$A = \int_{0}^{1,5\pi}[g(x) - f(x)]dx$	☐
E	$A = \int_{0}^{0,5\pi}[g(x) - f(x)]dx + \int_{0,5\pi}^{\pi}[f(x) - g(x)]dx + \int_{\pi}^{1,5\pi}[g(x) - f(x)]dx$	☒