Multiple Integration
Double Integrals

Question

Evaluate the following double integral by inspection.

$\iint_T (x + y)\, dA$

where T is the parallelogram with the points $(2, 2)$, $(1, -1)$, $(-2, -2)$ and $(-1, 1)$ as vertices.

Answer

T is symmetric about $x + y = 0$ so
$\iint_T (x + y)\, dA = 0$

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